```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1653HXP

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  JUL 20   Powerful new interactive analysis and visualization software,
                   STN AnaVist, now available
 NEWS  4  AUG 11   Derwent World Patents Index(R) web-based training during
                   August
 NEWS  5  AUG 11   STN AnaVist workshops to be held in North America
 NEWS  6  AUG 30   CA/CAplus -Increased access to 19th century research documents
 NEWS  7  AUG 30   CASREACT - Enhanced with displayable reaction conditions
 NEWS  8  SEP 09   ACD predicted properties enhanced in REGISTRY/ZREGISTRY

 NEWS EXPRESS  JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:43:33 ON 16 SEP 2005

=> file medline, uspatful, dgene, embase,wpids, fsta, jicst, biosis, biotechds,
scisearch
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.63       0.63

FILE 'MEDLINE' ENTERED AT 08:45:19 ON 16 SEP 2005

FILE 'USPATFULL' ENTERED AT 08:45:19 ON 16 SEP 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DGENE' ENTERED AT 08:45:19 ON 16 SEP 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION
```

```
FILE 'EMBASE' ENTERED AT 08:45:19 ON 16 SEP 2005
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'WPIDS' ENTERED AT 08:45:19 ON 16 SEP 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE 'FSTA' ENTERED AT 08:45:19 ON 16 SEP 2005
COPYRIGHT (C) 2005 International Food Information Service

FILE 'JICST-EPLUS' ENTERED AT 08:45:19 ON 16 SEP 2005
COPYRIGHT (C) 2005 Japan Science and Technology Agency (JST)

FILE 'BIOSIS' ENTERED AT 08:45:19 ON 16 SEP 2005
Copyright (c) 2005 The Thomson Corporation

FILE 'BIOTECHDS' ENTERED AT 08:45:19 ON 16 SEP 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE 'SCISEARCH' ENTERED AT 08:45:19 ON 16 SEP 2005
Copyright (c) 2005 The Thomson Corporation

=> s GFP mutant or fragment or analog or modified
   9 FILES SEARCHED...
L1     4281131 GFP MUTANT OR FRAGMENT OR ANALOG OR MODIFIED

=> l1 and (change emission spectrum)
L1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l1 and (change emission spectrum)
L2            0 L1 AND (CHANGE EMISSION SPECTRUM)

=> s l2 and (emission spectrum)
L3            0 L2 AND (EMISSION SPECTRUM)

=> s l1 and (excitation spectrum)
L4         1264 L1 AND (EXCITATION SPECTRUM)

=> e stubbs, s/au
E1            1     STUBBS WYNN PHYLLIS E/AU
E2            1     STUBBS Y/AU
E3            0 --> STUBBS, S/AU
E4            1     STUBBSI JOHN T II/AU
E5            1     STUBBSLLL JOHN/AU
E6            1     STUBBST J M/AU
E7            1     STUBBUSCH H/AU
E8           51     STUBBUSCH J/AU
E9            6     STUBBUSCH JUTTA/AU
E10           1     STUBBUSWAMY S G/AU
E11           5     STUBBY J/AU
E12           2     STUBBY J A/AU

=> e jones, a/au
E1            5     JONES ZIAMA M/AU
E2            2     JONES ZOE/AU
E3            0 --> JONES, A/AU
E4            1     JONES3 D T/AU
E5            1     JONES3 S B/AU
E6            1     JONESA/AU
E7            1     JONESA PETER G/AU
```

E8 1 JONESANTUNES L/AU
E9 1 JONESAUMTY D J/AU
E10 1 JONESB T G J/AU
E11 2 JONESBAADE R/AU
E12 2 JONESBARLOCK A/AU

=> d l4 ti abs ibib tot 1-10

L4 ANSWER 1 OF 1264 MEDLINE on STN
TI Bioluminescence resonance energy transfer from aequorin to a fluorophore: an artificial jellyfish for applications in multianalyte detection.
AB In nature, the green light emission observed in the jellyfish Aequorea victoria is a result of a non-radiative energy transfer from the excited-state aequorin to the green fluorescent protein. In this work, we have **modified** the photoprotein aequorin by attaching selected fluorophores at a unique site on the protein. This will allow for in vitro transfer of bioluminescent energy from aequorin to the fluorophore thus creating an "artificial jellyfish". The fluorophores are selected such that the **excitation spectrum** of the fluorophore overlaps with the emission spectrum of aequorin. By modifying aequorin with different fluorophores, bioluminescent labels with different emission maxima are produced, which will allow for the simultaneous detection of multiple analytes. By examining the X-ray crystal structure of the protein, four different sites for introduction of the unique cysteine residue were evaluated. Two fluorophores with differing emission maxima were attached individually to the mutants through the sulfhydryl group of the cysteine molecule. Two of the fluorophore-labeled mutants showed a peak corresponding to fluorophore emission thus indicating resonance energy transfer from aequorin to the fluorophore.
ACCESSION NUMBER: 2005186632 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15731912
TITLE: Bioluminescence resonance energy transfer from aequorin to a fluorophore: an artificial jellyfish for applications in multianalyte detection.
AUTHOR: Deo Sapna K; Mirasoli Mara; Daunert Sylvia
CORPORATE SOURCE: Department of Chemistry, University of Kentucky, Lexington, KY 40506-0055, USA.
CONTRACT NUMBER: GM47915-10 (NIGMS)
SOURCE: Analytical and bioanalytical chemistry, (2005 Apr) 381 (7) 1387-94. Electronic Publication: 2005-02-25. Journal code: 101134327. ISSN: 1618-2642.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200505
ENTRY DATE: Entered STN: 20050412
Last Updated on STN: 20050601
Entered Medline: 20050531

L4 ANSWER 2 OF 1264 MEDLINE on STN
TI Syntheses and spectral studies of functionalized ZnS nanoparticles as fluorescence probes.
AB In this work, nano-ZnS has been successfully prepared. The nano-ZnS has also been **modified** with sodium mercaptoacetic acid. The functionalized nanoparticles are water-soluble and biocompatible. All the nanoparticles have been characterized by IR spectra, UV spectra, fluorescence spectra and TEM images. In comparison with single organic fluorophore, the nanoparticles probes are brighter and more photostable, and do not suffer from blinking. The nanoparticles have a narrow, tunable, symmetric emission spectrum and a broad, continuous **excitation spectrum**. They are also photochemically stable. Effects of proteins and nucleic acids on the UV spectra and

fluorescence spectra of the functionalized ZnS have also been studied. The intensities of UV spectra and fluorescence spectra of the functionalized ZnS are enhanced by proteins, and, however, are quenched by nucleic acids. The functionalized colloidal solutions prepared are hopeful of use as fluorescence probes in biological staining and diagnostics.

ACCESSION NUMBER: 2005137348 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15768988
TITLE: Syntheses and spectral studies of functionalized ZnS nanoparticles as fluorescence probes.
AUTHOR: Wang Le-yu; Zhao Chang-qing; Zhu Chang-qing; Wang Lun
CORPORATE SOURCE: College of Chemistry and Materials Science, Anhui Normal University, Wuhu 241000, China.
SOURCE: Guang pu xue yu guang pu fen xi = Guang pu, (2004 Jan) 24 (1) 98-101.
Journal code: 9424805. ISSN: 1000-0593.
PUB. COUNTRY: China
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Chinese
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20050317
Last Updated on STN: 20050317

L4 ANSWER 3 OF 1264 MEDLINE on STN
TI Photodissociation spectroscopy and dynamics of the CH2CFO radical.
AB The photodissociation spectroscopy and dynamics resulting from excitation of the B (2)A(")<--X (2)A(") transition of CH(2)CFO have been examined using fast beam photofragment translational spectroscopy. The photofragment yield spectrum reveals vibrationally resolved structure between 29 870 and 38 800 cm(-1), extending approximately 6000 cm(-1) higher in energy than previously reported in a laser-induced fluorescence **excitation spectrum**. At all photon energies investigated, only the CH(2)F+CO and HCCO+HF **fragment** channels are observed. Both product channels yield photofragment translational energy distributions that are characteristic of a decay mechanism with a barrier to dissociation. Using the barrier impulsive model, it is shown that fragmentation to CH(2)F+CO products occurs on the ground state potential energy surface with the isomerization barrier between CH(2)CFO and CH(2)FCO governing the observed translational energy distributions. (c) 2004 American Institute of Physics.

ACCESSION NUMBER: 2004365315 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15267775
TITLE: Photodissociation spectroscopy and dynamics of the CH2CFO radical.
AUTHOR: Hoops Alexandra A; Gascooke Jason R; Kautzman Kathryn E; Faulhaber Ann Elise; Neumark Daniel M
CORPORATE SOURCE: Department of Chemistry, University of California, Berkeley, California 94720, USA.
SOURCE: Journal of chemical physics, (2004 May 8) 120 (18) 8494-504.
Journal code: 0375360. ISSN: 0021-9606.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20040723
Last Updated on STN: 20041219

L4 ANSWER 4 OF 1264 MEDLINE on STN
TI Conditioning light differentially desensitizes rod phototransduction mediated by native and 9-demethyl **analog** visual pigment.
AB Light adaptation in rod photoreceptors is thought to involve down-regulation of the signaling activity of photoactivated rhodopsin

(R*). However, electrophysiological evidence in support of this notion has come largely from studies of truncated, perfused rod outer segments and of rods genetically engineered to perturb known steps in R* deactivation. To test this hypothesis within intact native rods, we examined the effect of a fixed conditioning flash on rods prepared to contain 9-demethyl rhodopsin (9dR) in addition to residual rhodopsin. 9dR, an opsin-based photopigment containing 11-cis 9-demethylretinal as its chromophore, exhibits a blue-shifted **excitation spectrum** and sluggish deactivation kinetics, properties that distinguish the signaling activities of photoactivated 9dR (9dR*) from those of R*. Saturating photocurrent responses mediated preferentially by R* and 9dR* were obtained with test flash stimulation at 640 and 440 nm, respectively, under dark-adapted conditions (unconditioned response) and at a fixed time after a 640-nm conditioning flash of fixed high intensity. At each test wavelength, the decrease in photocurrent saturation period induced by the conditioning flash was analyzed to determine psi, the sensitivity of the conditioned response relative that of the unconditioned response; psi640/psi440, the ratio of relative sensitivities, was then obtained. Data obtained from 12 rods yielded psi640/psi440 = 0.60 +/- 0.13 (mean +/- SD). As common pools of transducin and other downstream components mediate transduction initiated by both R* and 9dR*, the finding that psi640 < psi440 provides direct evidence for the down-regulation specifically of R*'s signaling activity during rod light adaptation.

ACCESSION NUMBER: 2003180153 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12699081
TITLE: Conditioning light differentially desensitizes rod phototransduction mediated by native and 9-demethyl **analog** visual pigment.
AUTHOR: Corson D Wesley; Pepperberg David R
CORPORATE SOURCE: Department of Pathology and Laboratory Medicine, Medical University of South Carolina, Charleston, USA.
CONTRACT NUMBER: EY-01792 (NEI)
EY-04939 (NEI)
EY-05494 (NEI)
EY-07543 (NEI)
SOURCE: Visual neuroscience, (2003 Jan-Feb) 20 (1) 29-36. Journal code: 8809466. ISSN: 0952-5238.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200305
ENTRY DATE: Entered STN: 20030418
Last Updated on STN: 20030521
Entered Medline: 20030520

L4 ANSWER 5 OF 1264 MEDLINE on STN
TI Sequestering of Eu(III) by a GAAA RNA tetraloop.
AB The site-specific binding of metal ions maintains an important role in the structure, thermal stability, and function of folded RNA structures. RNA tetraloops of the "GNRA" family (where N = any base and R = any purine), which owe their unusual stability to base stacking and an extensive hydrogen bonding network, have been observed to bind metal ions having different chemical and geometric properties. We have used laser-induced lanthanide luminescence and isothermal titration calorimetry (ITC) to examine the metal-binding properties of an RNA stem loop of the GNRA family. Previous research has shown that a single Eu(III) ion binds the stem loop **fragment** in a highly dehydrated site with a K(d) of approximately 12 microM. Curve-fitting analysis of the broad luminescence **excitation spectrum** of Eu(III) upon complexation with the tetraloop **fragment** indicates the possibility of two microenvironments that do not differ in hydration number. Binding of Eu(III) to the loop was accompanied by positive enthalpic changes,

consistent with energetic cost of removal of water molecules and suggesting that the binding is entropically driven. By comparison, binding of Mg(II) or Mn(II) to the RNA loop, or Eu(III) to the DNA analogue of the loop, was associated with exothermic changes, consistent with predominantly outer-sphere coordination. These results suggest specific binding, most probably involving ligands on the 5' side of the loop.

ACCESSION NUMBER: 2002236866 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11929239
TITLE: Sequestering of Eu(III) by a GAAA RNA tetraloop.
AUTHOR: Mundoma Claudius; Greenbaum Nancy L
CORPORATE SOURCE: Department of Chemistry and Biochemistry, Florida State University, Tallahassee, Florida 32306-4390, USA.
SOURCE: Journal of the American Chemical Society, (2002 Apr 10) 124 (14) 3525-32.
Journal code: 7503056. ISSN: 0002-7863.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 20020429
Last Updated on STN: 20020612
Entered Medline: 20020611

L4 ANSWER 6 OF 1264 MEDLINE on STN
TI Microscopic fragmentation model for galactic cosmic ray studies.
AB We describe theoretical considerations for developing models of heavy ion fragmentation appropriate for galactic cosmic ray studies. Previous models have been based on parametric fits to limited experimental data or models that ignored some aspects of the reaction dynamics, including nuclear cluster effects. The abrasion-ablation description of the fragmentation process is re-formulated to describe the **excitation spectrum** of pre-**fragment** nuclei. The resulting spectrum is shown to be related to the many-body response of the nuclear ground-state and excited states, and an approach to simplify this function is discussed. An analytic solution to the nuclear de-excitation process is described which includes a realistic level spectrum of the GCR nuclei (A < 60). Comparisons are made to experiments for fragmentation of 24Mg, 32S, and 56Fe beams on several targets and results are discussed.

ACCESSION NUMBER: 2001661364 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11542783
TITLE: Microscopic fragmentation model for galactic cosmic ray studies.
AUTHOR: Cucinotta F A; Wilson J W; Tripathi R K; Townsend L W
CORPORATE SOURCE: NASA, Langley Research Center, Hampton, VA 23681-0001, USA.
SOURCE: Advances in space research : official journal of the Committee on Space Research (COSPAR), (1998) 22 (4) 533-7.
Journal code: 9878935. ISSN: 0273-1177.
(Investigators: Wilson J W, LaRC) Report No.: NASA-00024893.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Space Life Sciences
ENTRY MONTH: 200004
ENTRY DATE: Entered STN: 20011119
Last Updated on STN: 20011119
Entered Medline: 20000408

L4 ANSWER 7 OF 1264 MEDLINE on STN
TI NUCFRG2: a semiempirical nuclear fragmentation model.
AB The semiempirical abrasion/ablation model has been successful in

generating a large nuclear data base for use in the study of high charge and energy (HZE) ion beams, radiation physics and galactic cosmic ray shielding. The cross sections generated agree with the measured HZE fragmentation data to the degree that different experimental groups agree among themselves. Several improvements in the model have been made including a Coulomb trajectory correction, an improved treatment of nuclear attenuation factors, an improved second order correction to the spectator **fragment excitation spectrum**, a pre-equilibrium emission process, and competitive equilibrium emission of additional hydrogen and helium isotope fragments.

ACCESSION NUMBER: 2001659762 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11541190
TITLE: NUCFRG2: a semiempirical nuclear fragmentation model.
AUTHOR: Wilson J W; Shinn J L; Townsend L W; Tripathi R K; Badavi F F; Chun S Y
CORPORATE SOURCE: NASA Langley Research Center, Hampton, VA 23681-0001, USA.
SOURCE: Nuclear instruments & methods in physics research. Section B, Beam interactions with materials and atoms, (1994) 94 95-102.
Journal code: 9881766. ISSN: 0168-583X.
(Investigators: Wilson J W, NASA LaRC) Report No.: NASA-00022611.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Space Life Sciences
ENTRY MONTH: 199811
ENTRY DATE: Entered STN: 20011119
Last Updated on STN: 20011119
Entered Medline: 19981129

L4 ANSWER 8 OF 1264 MEDLINE on STN
TI Autofluorescence of the diabetic and healthy human cornea in vivo at different excitation wavelengths.
AB Corneal autofluorescence is higher in diabetes mellitus patients with retinopathy than in healthy subjects. In this study, the excitation spectra of corneal autofluorescence of diabetic patients and healthy controls in the range 365 nm-480 nm were compared in an attempt to identify the fluorophores responsible for corneal autofluorescence in health and disease (diabetes).Spectral measurements (from one eye) were recorded from five patients with proliferative diabetic retinopathy and five age-matched healthy controls, using a **modified** commercial scanning fluorophotometer with a mercury arc or a tungsten halogen lamp as excitation light source in combination with interference filters (excitation wavelengths: 365, 405, 420, 430, 436, 440, 450, 470 and 480 nm; bandwidth: 10 nm). Fluorescence emission was measured in the range 532 nm-630 nm. The sensitivity of the **modified** fluorophotometer was calibrated by using the **excitation spectrum** of fluorescein as a reference.The corneal excitation efficiency of the diabetic patients was higher than that of the healthy controls at each wavelength investigated (Mann-Witney test P<0.0005). The ratio between the mean values of both groups was equal for each excitation wavelength (mean ratio 1.9+/-0.12s.d.,P>0. 2), suggesting that the excitation spectra were equal. This indicates that the same fluorophores are responsible for the corneal autofluorescence in both groups. The shapes of the excitation spectra suggest the involvement of flavins, NAD(P)H, and at least one other, as yet unidentified, fluorophore.

ACCESSION NUMBER: 1999143077 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9986736
TITLE: Autofluorescence of the diabetic and healthy human cornea in vivo at different excitation wavelengths.
AUTHOR: Van Schaik H J; Alkemade C; Swart W; Van Best J A

CORPORATE SOURCE: Department of Ophthalmology, Leiden University Medical Center, The Netherlands.
SOURCE: Experimental eye research, (1999 Jan) 68 (1) 1-8. Journal code: 0370707. ISSN: 0014-4835.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199909
ENTRY DATE: Entered STN: 19991005
Last Updated on STN: 19991005
Entered Medline: 19990923

L4 ANSWER 9 OF 1264 MEDLINE on STN
TI Probing the active site of adenosine deaminase by a pH responsive fluorescent competitive inhibitor.
AB The adenine **analog** erythro-9-(2-hydroxy-3-nonyl)adenine, EHNA, a tight reversible inhibitor (KI = 1.6 x 10(-9) M) of adenosine deaminase (EC 3.5.4.4) (ADase), was **modified** into the fluorescent etheno derivative epsilon-EHNA. The latter is a competitive inhibitor of adenosine deaminase [KI = (2.80 +/- 0.01)10(-6) M], having the fluorescent properties of epsilon-adenines. Affinity to the active site, monitored by both steady-state and dynamic fluorescence polarization, was confirmed by competition experiments with 2'-deoxycoformycin, the substrate adenosine and EHNA. The epsilon-adenine moiety of epsilon-EHNA librates at the shallow active site of ADase. The low absorptivity of epsilon-EHNA required the measurement of fluorescence excitation spectra. Computer subtraction of fluorescence **excitation spectrum** of ADase from that of its equimolar complex with epsilon-EHNA revealed the corrected **excitation spectrum** of epsilon-EHNA at the active site of the enzyme. This spectrum mimics that of epsilon-EHNA at pH 5.5 in buffer solution, implying its protonation at the active site of the enzyme. These results are in agreement with the presence of acidic amino acids that are essential to the catalytic mechanism.
ACCESSION NUMBER: 1998135103 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9474762
TITLE: Probing the active site of adenosine deaminase by a pH responsive fluorescent competitive inhibitor.
AUTHOR: Caiolfa V R; Gill D; Parola A H
CORPORATE SOURCE: Department of Chemistry, Ben Gurion University of The Negev, Beer-Sheva, Israel.
SOURCE: Biophysical chemistry, (1998 Jan 1) 70 (1) 41-56. Journal code: 0403171. ISSN: 0301-4622.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199803
ENTRY DATE: Entered STN: 19980326
Last Updated on STN: 19980326
Entered Medline: 19980316

L4 ANSWER 10 OF 1264 MEDLINE on STN
TI Laser-induced fluorescence of Ba+ ions trapped and mass-selected in a Fourier transform ion cyclotron resonance mass spectrometer.
AB We present the design and preliminary results from a Fourier transform ion cyclotron resonance (ICR) mass spectrometer developed for the direct detection of UV/visible laser-induced fluorescence of trapped, mass-selected, gas-phase ions. A 3 T superconducting magnet and an open-ended multi-section cylindrical Penning trap capture and confine ions created by electron impact or laser desorption. Azimuthal quadrupolar excitation in the presence of ion/neutral collisions cools, axializes and mass selects ions as they fill the trap. A pulsed dye laser pumped by an

Nd:YAG laser provides electronic energy excitation. A Brewster window and baffles on each side of the vacuum chamber reduce the scattered light from the excitation laser. Laser-induced fluorescence is collected from mirrors and lenses and directed through a quartz window and fiber-optic bundle to a photomultiplier. The ICR and optical events are controlled by a modular ICR data station and GPIB and RS-232 interfaces. An **excitation spectrum** is demonstrated for atomic Ba+ ions, and should extend to laser-induced fluorescence of virtually any stable positive or negative gas-phase ions of arbitrary molecular weight: molecular or quasimolecular ions, **fragment** ions, adduct ions, and ions formed from ion/molecule reactions.

ACCESSION NUMBER: 97112052 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8953788
TITLE: Laser-induced fluorescence of Ba+ ions trapped and mass-selected in a Fourier transform ion cyclotron resonance mass spectrometer.
AUTHOR: Li G Z; Vining B A; Guan S; Marshall A G
CORPORATE SOURCE: Center for Interdisciplinary Magnetic Resonance, National High Magnetic Field Laboratory, Florida State University, Tallahassee 32310, USA.
CONTRACT NUMBER: GM-31683 (NIGMS)
SOURCE: Rapid communications in mass spectrometry : RCM, (1996) 10 (14) 1850-4.
Journal code: 8802365. ISSN: 0951-4198.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199701
ENTRY DATE: Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970123

L4 ANSWER 11 OF 1264 MEDLINE on STN
TI Binding of DNA quenches tyrosine fluorescence of RecA without energy transfer to DNA bases.
AB The binding of single- as well as double-stranded DNA to RecA, in the presence of the cofactor **analog** ATP gamma S (adenosine 5'-O-(3-thiotriphosphate)), leads to about 20% quenching of the tyrosine fluorescence of the protein but to no essential change of the tryptophan fluorescence. The **excitation spectrum** of the fluorescent DNA **analog** poly(d epsilon A), complexed with RecA, shows no sign of energy transfer from the tyrosine residues of RecA to the etheno-**modified** adenine bases of the polynucleotide. From this observation we reject stacking interaction between tyrosine residues and DNA bases. The RecA filament may bind up to three molecules of single-stranded DNA; however, the observed fluorescence change occurs only upon the binding of the first DNA strand, indicating that the binding mode of this first strand is different from those of the others. The fluorescence change is interpreted in terms of a conformational change of the RecA protein promoted by cooperative binding to DNA. A larger quenching (40%) upon the binding of single-stranded DNA is observed in the absence of cofactor. At high salt condition, which induces ATPase activity in RecA just as DNA binding does, the tyrosine fluorescence is more pronounced than at low salt conditions, indicating that the effect induced by high salt is different from the conformational change induced by DNA binding.

ACCESSION NUMBER: 93131926 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8420955
TITLE: Binding of DNA quenches tyrosine fluorescence of RecA without energy transfer to DNA bases.
AUTHOR: Eriksson S; Norden B; Takahashi M
CORPORATE SOURCE:. Department of Physical Chemistry, Chalmers University of

Technology, Goteborg, Sweden.
SOURCE: Journal of biological chemistry, (1993 Jan 25) 268 (3) 1805-10.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199302
ENTRY DATE: Entered STN: 19930226
Last Updated on STN: 19980206
Entered Medline: 19930218

L4 ANSWER 12 OF 1264 MEDLINE on STN
TI A naphthyl **analog** of the aminostyryl pyridinium class of potentiometric membrane dyes shows consistent sensitivity in a variety of tissue, cell, and model membrane preparations.
AB The fast potentiometric indicator di-4-ANEPPS is examined in four different preparations: lipid vesicles, red blood cells, squid giant axon, and guinea pig heart. The dye gives consistent potentiometric responses in each of these systems, although some of the detailed behavior varies. In lipid vesicles, the dye displays an increase in fluorescence combined with a red shift of the **excitation spectrum** upon hyperpolarization. Similar behavior is found in red cells where a dual wavelength radiometric measurement is also demonstrated. The signal-to-noise ratio of the potentiometric fluorescence response is among the best ever recorded on the voltage-clamped squid axon. The dye is shown to be a faithful and persistent monitor of cardiac action potentials with no appreciable loss of signal or deterioration of cardiac activity for periods as long as 2 hr with intermittent illumination every 10 min. These results, together with previously published applications of the dye to a spherical lipid bilayer model and to cells in culture, demonstrate the versatility of di-4-ANEPPS as a fast indicator of membrane potential.
ACCESSION NUMBER: 93108427 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1469705
TITLE: A naphthyl **analog** of the aminostyryl pyridinium class of potentiometric membrane dyes shows consistent sensitivity in a variety of tissue, cell, and model membrane preparations.
AUTHOR: Loew L M; Cohen L B; Dix J; Fluhler E N; Montana V; Salama G; Wu J Y
CORPORATE SOURCE: Department of Physiology, University of Connecticut Health Center, Farmington 06030.
CONTRACT NUMBER: GM35063 (NIGMS)
NS08437 (NINDS)
RR04139 (NCRR)
SOURCE: Journal of membrane biology, (1992 Oct) 130 (1) 1-10.
Journal code: 0211301. ISSN: 0022-2631.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 19930212
Last Updated on STN: 19930212
Entered Medline: 19930128

L4 ANSWER 13 OF 1264 MEDLINE on STN
TI Uptake and intracellular sequestration of divalent cations in resting and methacholine-stimulated mouse lacrimal acinar cells. Dissociation by Sr2+ and Ba2+ of agonist-stimulated divalent cation entry from the refilling of the agonist-sensitive intracellular pool.
AB The abilities of various divalent cations to enter the cytoplasm of mouse

lacrimal acinar cells was examined under resting and agonist-stimulated conditions, by monitoring their effects on the fluorescence of cytosolic fura-2. In vitro, Ni2+, Co2+, and Mn2+ quenched the fura-2 fluorescence, whereas Sr2+, Ba2+, and La3+ produced an **excitation spectrum** and maximum brightness similar to Ca2+. Stimulation of mouse lacrimal acinar cells with methacholine (MeCh) caused a biphasic elevation of intracellular Ca2+ concentration [(Ca2+]i) resulting from a release of Ca2+ from intracellular pools followed by a sustained entry of extracellular Ca2+. Neither La3+ nor Ni2+ entered the cells under resting or stimulated conditions, but both blocked Ca2+ entry. Although both Co2+ and Mn2+ entered unstimulated cells, this process was not increased by MeCh. Both Sr2+ and Ba2+ were capable of supporting a sustained increase in fura-2 fluorescence in response to MeCh, indicating that these cations can enter the cells through the agonist-regulated channels. However, Sr2+, but not Ba2+, was capable of refilling the agonist-sensitive intracellular stores. These findings demonstrate dissociation of agonist-induced Ca2+ entry from intracellular Ca2+ pool refilling and thereby provide strong support for the recently **modified** version of the capacitative Ca2+ entry model according to which influx into the cytoplasm occurs directly across the plasma membrane and does not require a specialized cation channel directly linking the extracellular space and the intracellular Ca2+ stores.

ACCESSION NUMBER: 90110121 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2404009
TITLE: Uptake and intracellular sequestration of divalent cations in resting and methacholine-stimulated mouse lacrimal acinar cells. Dissociation by Sr2+ and Ba2+ of agonist-stimulated divalent cation entry from the refilling of the agonist-sensitive intracellular pool.
AUTHOR: Kwan C Y; Putney J W Jr
CORPORATE SOURCE: Calcium Regulation Section, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709.
SOURCE: Journal of biological chemistry, (1990 Jan 15) 265 (2) 678-84.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199002
ENTRY DATE: Entered STN: 19900328
Last Updated on STN: 19990129
Entered Medline: 19900221

L4 ANSWER 14 OF 1264 MEDLINE on STN
TI Denaturation and renaturation studies of benzo[a]pyrene metabolite **modified** DNAs.
AB Evidence from absorbance, fluorescence, and circular dichroism (CD) measurements strongly suggests that adduct conformations at the binding sites are grossly different before and after thermal denaturation of (+)-trans-7,8-dihydroxy-anti-9,10-epoxy-7,8,9,10-tetrahydrobenzo[a]py ren e [(+)-anti-BPDE] **modified** DNAs. This conclusion is reached through the following observations: (1) upon melting and cooling, the (+)-anti-BPDE-**modified** DNA exhibits pronounced hypochromic effects with concomitant spectral red shifts for the pyrenyl absorbance; (2) the pyrenyl CD spectrum reverses sign upon thermal denaturation-renaturation; (3) the fluorescence emission spectra resulting from excitations at 353 nm (10 nm to the red of hydrolyzed and unbound anti-BPDE) exhibit enhanced intensities and spectral red shifts for the thermally denatured and cooled adducts; and (4) in contrast to the absence of a shoulder prior to melting, the postmelt adducts exhibit a prominent 355-nm maximum (evidence of stacking interactions) in the

excitation spectrum when 384-387-nm emission is monitored. Studies with synthetic polynucleotides further reveal that (+)-anti-BPDE-**modified** poly(dG).poly(dC) exhibits the greatest nonreversible renaturation at the binding sites, possibly as a consequence of pyrenyl self-stacking. This, coupled with the previous findings that this polymer suffers the most extensive (+)-anti-BPDE modification, appears to suggest that (dG)n . (dC)n regions may be responsible for such observed effects in native DNA.

ACCESSION NUMBER: 88024946 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3117102
TITLE: Denaturation and renaturation studies of benzo[a]pyrene metabolite **modified** DNAs.
AUTHOR: Chen F M
CORPORATE SOURCE: Department of Chemistry, Tennessee State University, Nashville 37203.
CONTRACT NUMBER: CA-42682 (NCI)
S06RR0892 (NCRR)
SOURCE: Biochemistry, (1987 Jul 14) 26 (14) 4323-31.
Journal code: 0370623. ISSN: 0006-2960.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198712
ENTRY DATE: Entered STN: 19900305
Last Updated on STN: 19970203
Entered Medline: 19871207

L4 ANSWER 15 OF 1264 MEDLINE on STN
TI Terbium-binding properties of calsequestrin from skeletal muscle sarcoplasmic reticulum.
AB Calsequestrin (Mr = 40,000) is a calcium-binding protein (Kd = 1 mM, 50 sites/molecule) located within the terminal cisternae of the sarcoplasmic reticulum of skeletal muscle cells. The interaction of terbium, a calcium **analog**, with rabbit skeletal muscle calsequestrin was studied by fluorescence and circular dichroism spectroscopy. Direct measurement of terbium binding using a fluorescence assay for terbium revealed that calsequestrin bound approx. 30 mol of terbium per mol of protein with an affinity of approx. 7 microM. The fluorescence of terbium measured at 545 nm was enhanced dramatically upon binding to calsequestrin, reaching a maximum value at a terbium to protein ratio of 28. The **excitation spectrum** of protein-bound terbium and chemical modification studies revealed that energy transfer occurred between aromatic residues, including tryptophan and bound terbium. Terbium bound to calsequestrin could be removed by EGTA, or displaced by Ca2+ or La3+. In the presence of Ca2+ or La3+ terbium bound to calsequestrin with a higher apparent affinity and lower capacity. 0.1 M KCl or 5 mM MgCl2 had little effect on terbium binding. Terbium increased the intrinsic fluorescence of calsequestrin 2-fold, and increased the alpha-helical content of calsequestrin from 16 to 33%. Terbium binding induces the same conformational changes in calsequestrin as does calcium, confirming that terbium is a useful calcium **analog** in this system.

ACCESSION NUMBER: 88000711 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3651471
TITLE: Terbium-binding properties of calsequestrin from skeletal muscle sarcoplasmic reticulum.
AUTHOR: Ohnishi M; Reithmeier R A
CORPORATE SOURCE: Department of Biochemistry, University of Alberta, Edmonton, Canada.
SOURCE: Biochimica et biophysica acta, (1987 Sep 24) 915 (2) 180-7.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198710
ENTRY DATE: Entered STN: 19900305
Last Updated on STN: 19980206
Entered Medline: 19871030

L4 ANSWER 16 OF 1264 MEDLINE on STN
TI Quantum counter for correcting fluorescence excitation spectra at 320- to 800-nm wavelengths.
AB A procedure for recording corrected fluorescence excitation spectra to wavelengths as long as 800 nm is described. The procedure involves the use of a commercial spectrofluorometer, which is **modified** by substituting 1,1',3,3,3',3'-hexamethylindotricarbocyanine perchlorate in place of rhodamine B as the quantum counter dye. This modification is applicable to spectrofluorometers supplied by several different manufacturers and can be accomplished by a user having only modest technical skills. A study of the fluorescence **excitation spectrum** of bacteriochlorophyll a is presented as an illustration of the use of the procedure. The procedure will be valuable in biological and biochemical studies that involve the use of long-wavelength fluorescent probes of either natural or synthetic origin.
ACCESSION NUMBER: 87296703 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3619023
TITLE: Quantum counter for correcting fluorescence excitation spectra at 320- to 800-nm wavelengths.
AUTHOR: Nothnagel E A
CONTRACT NUMBER: S07 RR07010-19 (NCRR)
SOURCE: Analytical biochemistry, (1987 May 15) 163 (1) 224-37. Journal code: 0370535. ISSN: 0003-2697.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198708
ENTRY DATE: Entered STN: 19900305
Last Updated on STN: 19970203
Entered Medline: 19870831

L4 ANSWER 17 OF 1264 MEDLINE on STN
TI Spectroscopic studies of DNA complexes formed after reaction with anti-benzo[a]pyrene-7,8-dihydrodiol-9,10-oxide enantiomers of different carcinogenic potency.
AB Light absorption, fluorescence and linear dichroism (l.d.) spectroscopy and fluorescence lifetime measurements reveal characteristic differences that arise from structural differences between the DNA complexes with the optical enantiomers (+)- and (-)-anti-benzo[a]pyrene-7,8-dihydrodiol-9,10-epoxides (BPDE), a strong and a weak carcinogen, respectively. Both types of complexes appear heterogeneous but can be described as composed of two major complex types I and II, in different proportions. Like previously observed for DNA **modified** by racemic anti-BPDE, the only distinguishable spectral component of (+)-anti-BPDE-DNA is the type II complex, whereas the (-)-anti-BPDE-DNA is a mixture of both types I and II complexes. The type I complex is characterized by negative I.d., a light absorption and **excitation spectrum** maximum (above 300 nm) at 354 nm and strong fluorescence quenching in native DNA, properties expected for an intercalation complex in the classical sense. The type II complex on the other hand is characterized by positive I.d., a light absorption and **excitation spectrum** maximum (above 300 nm) at 345 nm, and moderate fluorescence quenching in native DNA, properties not consistent with intercalation geometry. Rather, the BPDE chromophore forms less than 55 degree angle with the mean direction of the helix axis. Its interaction with the DNA bases seems to be less than in

complex I, and is highly sensitive to Ag+ ions. The type II complex may be associated with local obstruction of base-pairing properties of native DNA. Since DNA-binding of chemical carcinogens is considered crucial for tumour initiation it follows that the unique properties of the type II BPDE-DNA complex may be of fundamental importance in benzo[a]pyrene carcinogenesis.

ACCESSION NUMBER: 84283064 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6432355
TITLE: Spectroscopic studies of DNA complexes formed after reaction with anti-benzo[a]pyrene-7,8-dihydrodiol-9,10-oxide enantiomers of different carcinogenic potency.
AUTHOR: Jernstrom B; Lycksell P O; Graslund A; Norden B
CONTRACT NUMBER: 1RC1 CA 26201 (NCI)
SOURCE: Carcinogenesis, (1984 Sep) 5 (9) 1129-35.
Journal code: 8008055. ISSN: 0143-3334.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198410
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19970203
Entered Medline: 19841024

L4 ANSWER 18 OF 1264 MEDLINE on STN
TI Spectroscopic characterization of beta-lactoglobulin-retinol complex.
AB 1. The absorption spectrum of retinol when bound to beta-lactoglobulin is vibrationally resolved. The circular dichroism spectrum exhibits the same structure, as does the fluorescence **excitation spectrum** . 2. Two molecules of retinol are bound per protein dimer, with a binding constant (Kd) of 2 x 10(-8) M. Also, by fluorescence titration it was found that the monomer binds one molecule of retinol with essentially the same Kd. 2. Energy transfer occurs from tryptophan (donor) to retinol (acceptor) with a rate constant, k, of 4.4 x 10(8) s-1. The distance between the centers of mass of the transition is 34 A, corresponding to the energy transfer efficiency of 44%. 4. The fluoresence lifetime of retinol increases dramatically on binding to beta-lactoglobulin, from approx. 2 to approx. 10 ns, as does the fluorescence quantum yield. 5. The retinol binding to beta-lactoglobulin does not show a pH dependence and the binding site is hydrophobic. 6. On the Sephadex G-100 column, retinol is chemically **modified** to a retro derivative which binds even more strongly to beta-lactoglobulin than does retinol. 7. The beta-lactoglobulin-retinol complex rotates anisotropically in solution with a fast (3 ns) and a slower (12 ns) component. This may be attributed to retinol being found at a flexible region of the protein, where only segmental flexibility is observed, weighted by its proximity to one of the major axis rotational times.

ACCESSION NUMBER: 81021738 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7417499
TITLE: Spectroscopic characterization of beta-lactoglobulin-retinol complex.
AUTHOR: Fugate R D; Song P S
SOURCE: Biochimica et biophysica acta, (1980 Sep 23) 625 (1) 28-42.
Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198012
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19801216

L4 ANSWER 19 OF 1264 USPATFULL on STN

TI Imaging systems for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

AB Optical systems that provide for simultaneous images and spectra from an object, such as a tissue sample, an industrial object such as a computer chip, or any other object that can be viewed with an optical system such as a microscope, endoscope, telescope or camera. In some embodiments, the systems provide multiple images corresponding to various desired wavelength ranges within an original image of the object, as well as, if desired, directional pointer(s) that can provide both an identification of the precise location from which a spectrum is being obtained, as well as enhancing the ability to point the device.

ACCESSION NUMBER: 2005:234482 USPATFULL
TITLE: Imaging systems for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices
INVENTOR(S): Zeng, Haishan, Vancouver, CANADA
Lam, Stephen, Vancouver, CANADA
Palcic, Branko Mihael, Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005203423	A1	20050915
APPLICATION INFO.:	US 2005-58045	A1	20050214 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-28568, filed on 19 Dec 2001, GRANTED, Pat. No. US 6898458 Continuation-in-part of Ser. No. US 2000-741731, filed on 19 Dec 2000, GRANTED, Pat. No. US 6826424
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GRAYBEAL, JACKSON, HALEY LLP, 155 - 108TH AVENUE NE, SUITE 350, BELLEVUE, WA, 98004-5901, US
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1-77
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 3463

L4 ANSWER 20 OF 1264 USPATFULL on STN

TI Image detection apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

AB Optical systems that provide for simultaneous images and spectra from an object, such as a tissue sample, an industrial object such as a computer chip, or any other object that can be viewed with an optical system such as a microscope, endoscope, telescope or camera. In some embodiments, the systems provide multiple images corresponding to various desired wavelength ranges within an original image of the object, as well as, if desired, directional pointer(s) that can provide both an identification of the precise location from which a spectrum is being obtained, as well as enhancing the ability to point the device.

ACCESSION NUMBER: 2005:234480 USPATFULL
TITLE: Image detection apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices
INVENTOR(S): Zeng, Haishan, Vancouver, CANADA
Lam, Stephen, Vancouver, CANADA
Palcic, Branko Mihael, Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005203421	A1	20050915
APPLICATION INFO.:	US 2005-53263	A1	20050207 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-28568, filed on 19 Dec 2001, GRANTED, Pat. No. US 6898458 Continuation-in-part of Ser. No. US 2000-741731, filed on 19 Dec 2000, GRANTED, Pat. No. US 6826424
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GRAYBEAL, JACKSON, HALEY LLP, 155 - 108TH AVENUE NE, SUITE 350, BELLEVUE, WA, 98004-5901, US
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1-37
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 3454

L4 ANSWER 21 OF 1264 USPATFULL on STN
TI Luminescent compounds
AB The invention provides reporter compounds based on squaric, croconic, and/or rhodizonic acid, among others, reactive intermediates used to synthesize the reporter compounds, and methods of synthesizing and using the reporter compounds, among others. The reporter compounds relate generally to the following structure ##STR1## Here, Z is a four, five, or six-member aromatic ring, and A, B, C, D, E, and F are substituents of Z, where F is absent when Z is a five-member ring, and where E and F are absent when Z is a four-member ring.

A, B, C, D, E, and F are selected from a variety of elements and groups, including but not necessarily limited to O, S, Se, Te, N--R.sup.a, C(R.sup.b)(R.sup.c), W.sup.1, and W.sup.2. ##STR2##

ACCESSION NUMBER: 2005:233628 USPATFULL
TITLE: Luminescent compounds
INVENTOR(S): Terpetschnig, Ewald A., Urbana, IL, UNITED STATES
Tatarets, Anatoliy, Kharkov, UKRAINE
Galkina, Olga, Kharkov, UKRAINE
Fedyunyaeva, Iryna, Kharkov, UKRAINE
Patsenker, Leonid, Kharkov, UKRAINE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005202565	A1	20050915
APPLICATION INFO.:	US 2004-986446	A1	20041110 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-724580, filed on 28 Nov 2003, PENDING Continuation-in-part of Ser. No. US 2003-396293, filed on 24 Mar 2003, PENDING Continuation-in-part of Ser. No. WO 2003-US10995, filed on 10 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2000-684627, filed on 6 Oct 2000, GRANTED, Pat. No. US 6538129 Continuation of Ser. No. WO 1999-US7627, filed on 7 Apr 1999, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1998-19815659	19980408
	US 1998-83820P	19980501 (60)
	US 2002-371832P	20020410 (60)
	US 2002-371832P	20020410 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KOLISCH HARTWELL, P.C., 520 S.W. YAMHILL STREET, SUITE 200, PORTLAND, OR, 97204, US

NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 1982

L4 ANSWER 22 OF 1264 USPATFULL on STN
TI Device for generating a laser light beam
AB A device for generating a laser light beam includes a module. The module includes at least one laser light source, and a mechanical, an electrical and/or an optical interface defined towards an outside of the module.

ACCESSION NUMBER: 2005:232510 USPATFULL
TITLE: Device for generating a laser light beam
INVENTOR(S): Seyfried, Volker, Nussloch, GERMANY, FEDERAL REPUBLIC OF
Storz, Rafael, Heidelberg, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Leica Microsystems Heidelberg GmbH, Mannheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005201441	A1	20050915	
APPLICATION INFO.:	US 2004-11475	A1	20041214	(11)

	NUMBER	DATE	
PRIORITY INFORMATION:	DE 2003-DE10361177	20031222	
	DE 2003-DE10359012	20031215	
	US 2003-532672P	20031223	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DAVIDSON, DAVIDSON & KAPPEL, LLC, 485 SEVENTH AVENUE, 14TH FLOOR, NEW YORK, NY, 10018, US
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 555

L4 ANSWER 23 OF 1264 USPATFULL on STN
TI Monomeric and dimeric fluorescent protein variants and methods for making same
AB The present invention relates generally to fluorescent proteins and fluorescent protein variants, and more specifically to monomeric and dimeric forms of Anthozoan fluorescent proteins. In one aspect, the present invention provides variants of fluorescent proteins, where the variants have a reduced propensity to tetramerize, and form dimeric or monomeric structures. In a further aspect, the present invention provides variants of fluorescent proteins, the variants being characterized by more efficient maturation than corresponding fluorescent proteins from which they are derived. The invention also relates to methods of making and using such fluorescent proteins and fluorescent protein variants, including fluorescent protein monomers and dimers.

ACCESSION NUMBER: 2005:226918 USPATFULL
TITLE: Monomeric and dimeric fluorescent protein variants and methods for making same
INVENTOR(S): Campbell, Robert E., Edmonton, CANADA
Shaner, Nathan C., La Jolla, CA, UNITED STATES
Tsien, Roger Y., La Jolla, CA, UNITED STATES

	NUMBER	KIND	DATE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005196768	A1	20050908
APPLICATION INFO.:	US 2004-931304	A1	20040830 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-209208, filed on 29 Jul 2002, PENDING Continuation-in-part of Ser. No. US 2002-121258, filed on 10 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2001-866538, filed on 24 May 2001, GRANTED, Pat. No. US 6852849 Continuation-in-part of Ser. No. US 2001-794308, filed on 26 Feb 2001, PENDING

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506, US
NUMBER OF CLAIMS: 71
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 64 Drawing Page(s)
LINE COUNT: 4789

L4 ANSWER 24 OF 1264 USPATFULL on STN
TI Light emitting device and a lighting apparatus
AB A light emitting device comprises at least two lead wires, a light emitting element that is disposed on an end portion of at least one of said lead wires and connected electrically with the end portion and the other lead wire, and a phosphor that absorbs at least part of the light emitted from said light emitting element and emanates light having different wavelengths from the wavelength of the light emitted from said light emitting element, wherein the **excitation spectrum** of said phosphor has a flat region in a wavelength range including a primary wavelength of the light from said light emitting element.

ACCESSION NUMBER: 2005:224759 USPATFULL
TITLE: Light emitting device and a lighting apparatus
INVENTOR(S): Sakuma, Ken, Sakura-shi, JAPAN
Omichi, Koji, Sakura-shi, JAPAN
Hirosaki, Naoto, Tsukuba-shi, JAPAN
PATENT ASSIGNEE(S): FUJIKURA LTD., NATIONAL INSTITUTE FOR MATERIAL SCIENCE (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005194604	A1	20050908
APPLICATION INFO.:	US 2005-67741	A1	20050301 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2004-58092	20040302
	JP 2004-58184	20040302
	JP 2005-52068	20050225

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., SUITE 800, WASHINGTON, DC, 20037, US
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 15 Drawing Page(s)
LINE COUNT: 751

L4 ANSWER 25 OF 1264 USPATFULL on STN
TI Porous gas sensors and method of preparation thereof
AB Devices including conductometric porous silicon gas sensors, methods of fabricating conductometric porous silicon gas sensors, methods of

selecting a device, methods of detecting a concentration of a gas, and methods of analyzing data.

ACCESSION NUMBER: 2005:223959 USPATFULL
TITLE: Porous gas sensors and method of preparation thereof
INVENTOR(S): DeBoer, John, Decatur, GA, UNITED STATES
Lewis, Stephen Edward, Atlanta, GA, UNITED STATES
Hesketh, Peter, Atlanta, GA, UNITED STATES
Gole, James, Atlanta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005193800	A1	20050908
APPLICATION INFO.:	US 2005-94584	A1	20050330 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2005-41358, filed on 24 Jan 2005, PENDING Continuation of Ser. No. US 2003-633259, filed on 1 Aug 2003, GRANTED, Pat. No. US 6893892 Division of Ser. No. US 2002-268860, filed on 10 Oct 2002, GRANTED, Pat. No. US 6673644 Continuation-in-part of Ser. No. US 2001-820412, filed on 29 Mar 2001, GRANTED, Pat. No. US 6589883

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-644716P	20050118 (60)
	US 2004-558759P	20040401 (60)
	US 2005-653674P	20050216 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP, 100 GALLERIA PARKWAY, NW, STE 1750, ATLANTA, GA, 30339-5948, US
NUMBER OF CLAIMS: 78
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 3041

L4 ANSWER 26 OF 1264 USPATFULL on STN
TI Compositions for the detection of enzyme activity in biological samples and methods of use thereof
AB The present invention provides for novel reagents whose fluorescence increases in the presence of particular proteases. The reagents comprise a characteristically folded peptide backbone each end of which is conjugated to a fluorophore. When the folded peptide is cleaved, as by digestion with a protease, the fluorophores provide a high intensity fluorescent signal at a visible wavelength. Because of their high fluorescence signal in the visible wavelengths, these protease indicators are particularly well suited for detection of protease activity in biological samples, in particular in frozen tissue sections. Thus this invention also provides for methods of detecting protease activity in situ in frozen sections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:217353 USPATFULL
TITLE: Compositions for the detection of enzyme activity in biological samples and methods of use thereof
INVENTOR(S): Komoriya, Akira, Rockville, MD, UNITED STATES
Packard, Beverly S., Rockville, MD, UNITED STATES
PATENT ASSIGNEE(S): Onco Immunin, Inc., Kensington, MD, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6936687	B1	20050830

APPLICATION INFO.: US 1999-394019 19990910 (9)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1998-US300, filed on 20 Feb 1998, PENDING Continuation-in-part of Ser. No. US 1997-802981, filed on 20 Feb 1997, Pat. No. US 6037137
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Weber, Jon
ASSISTANT EXAMINER: Kam, Chih-Min
LEGAL REPRESENTATIVE: Quine I. P. Law Group, P.C., Hunter, Tom
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 4720
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 27 OF 1264 USPATFULL on STN
TI Non-peptidyl agents with pHSP20-like activity, and uses thereof
AB The present invention provides compositions and methods for modulating smooth muscle cells. The present invention also provides methods of identifying small molecule candidate therapeutic agents for modulating smooth muscle.

ACCESSION NUMBER: 2005:215592 USPATFULL
TITLE: Non-peptidyl agents with pHSP20-like activity, and uses thereof
INVENTOR(S): von Rechenberg, Moritz, Salt Lake City, UT, UNITED STATES
Peltier, John M., Sandy, UT, UNITED STATES
Sahasrabudhe, Sudhir R., Sandy, UT, UNITED STATES
Askovic, Srdjan, Salt Lake City, UT, UNITED STATES
Selliah, Robert, Midvale, UT, UNITED STATES
Zarembinski, Thomas, Salt Lake City, UT, UNITED STATES
PATENT ASSIGNEE(S): Prolexys Pharmaceuticals Inc., Salt Lake City, UT, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005187268	A1	20050825	
APPLICATION INFO.:	US 2005-65270	A1	20050223	(11)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-547157P	20040223	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 3170

L4 ANSWER 28 OF 1264 USPATFULL on STN
TI Naphthofluorescein-based metal sensors, and methods of making and using the same
AB The present invention is directed, in part, to naphthofluorescein-based ligands for detection of metal ions, and methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:214883 USPATFULL
TITLE: Naphthofluorescein-based metal sensors, and methods of

making and using the same

INVENTOR(S): Lippard, Stephen J., Cambridge, MA, UNITED STATES
Chang, Christopher J., Berkeley, CA, UNITED STATES
Nolan, Elizabeth M., Cambridge, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005186555	A1	20050825
APPLICATION INFO.:	US 2005-39396	A1	20050119 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-537121P	20040119 (60)
	US 2004-546052P	20040219 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2413
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 29 OF 1264 USPATFULL on STN
TI Systems and methods for monitoring health and delivering drugs transdermally
AB The present invention pertains to a system and method for transdermal sampling, comprising: at least one sampler for retrieving and transferring at least one analyte obtained transdermally from the skin of a subject; at least one detector system for identifying and quantifying said at least one analyte; and at least one logic module for (i) receiving and storing input data from said at least one detector, (ii) relating the input data to other data obtained from the subject, (iii) displaying output information, (iv) transmitting the output information to another system, and (v) controlling the operation of said at least one sampler and at least one detector.

ACCESSION NUMBER: 2005:209822 USPATFULL
TITLE: Systems and methods for monitoring health and delivering drugs transdermally
INVENTOR(S): Currie, John F., Bethesda, MD, UNITED STATES
Paranjape, Makarand, Arlington, VA, UNITED STATES
Peck, Carl C., Rockville, MD, UNITED STATES
White, Robert C., Fairfax, VA, UNITED STATES
Schneider, Thomas W., Gaithersburg, MD, UNITED STATES
PATENT ASSIGNEE(S): Science Applications International Corporation (U.S. corporation)
Dermal Systems International, Inc. (U.S. corporation)
Georgetown University (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005182307	A1	20050818
APPLICATION INFO.:	US 2005-90156	A1	20050328 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-866826, filed on 30 May 2001, GRANTED, Pat. No. US 6887202

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-208327P	20000601 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KILPATRICK STOCKTON LLP, 607 14TH STREET, N.W., WASHINGTON, DC, 20005, US
NUMBER OF CLAIMS: 95
EXEMPLARY CLAIM: 1-114
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 3215

L4 ANSWER 30 OF 1264 USPATFULL on STN
TI Humanized renilla reniformis green fluorescent protein as a scaffold
AB The present invention discloses green fluorescent protein (GFP) and GFP variants that are derived from Renilla reniformis. The Renilla reniformis GFP and variants there of, are optimized for expression in human cells and are further used as a scaffold for the in vivo display of peptides and peptide libraries.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:209765 USPATFULL
TITLE: Humanized renilla reniformis green fluorescent protein as a scaffold
INVENTOR(S): Happe, Scott, Austin, TX, UNITED STATES
Dubois, Dwight, Austin, TX, UNITED STATES
Leininger, Katie J., New York, NY, UNITED STATES
PATENT ASSIGNEE(S): Stratagene (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005182250	A1	20050818	
APPLICATION INFO.:	US 2003-615064	A1	20030708	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-394737P	20020710 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS / STR, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199, US
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2242
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 31 OF 1264 USPATFULL on STN
TI Compositions and methods for the modulation of viral maturation
AB This application describes a family of nucleic acid sequences and proteins encoded thereby that play a role in viral maturation: the Alternate Viral Maturation Scaffolding Protein, or the AVMSP family of proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:208876 USPATFULL
TITLE: Compositions and methods for the modulation of viral maturation
INVENTOR(S): Greener, Tsvika, Ness-Ziona, ISRAEL
Moskowitz, Haim, Jerusalem, ISRAEL
Reiss, Yuval, Kiriat-Ono, ISRAEL
Alroy, Iris, Ness-Ziona, ISRAEL

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005181355	A1	20050818	
APPLICATION INFO.:	US 2003-485225	A1	20020731	(10)
	WO 2002-US24589		20020731	

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-308958P	20010731 (60)
	US 2003-345846P	20011109 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 101 Drawing Page(s)
LINE COUNT: 8161
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 32 OF 1264 USPATFULL on STN
TI Photochemical hole burning media
AB A photochemical hole burning medium is composed of a material in which a rare earth complex and a reducing agent is dispersed in a solid matrix. The rare earth complex may be at least one complex selected from the group consisting of a europium (III) crown ether complex, a europium (III) polyether complex, and a europium (III) cryptand complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:208828 USPATFULL
TITLE: Photochemical hole burning media
INVENTOR(S): Machida, Kenichi, Minoo City, JAPAN
PATENT ASSIGNEE(S): Osaka University, Suita City, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005181307	A1	20050818
APPLICATION INFO.:	US 2005-106541	A1	20050415 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2002-84480, filed on 28 Feb 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-57113	20010301

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: OLIFF & BERRIDGE, PLC, P.O. BOX 19928, ALEXANDRIA, VA, 22320, US
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 33 OF 1264 USPATFULL on STN
TI High resolution fourier transform ion cyclotron resonance (FT-ICR) mass spectrometry methods and apparatus
AB A high resolution Fourier Transform Ion Cyclotron Resonance (FT-ICR) mass spectrometry system includes excitation circuitry including an excitation amplifier for generating an electrical excitation signal and excitation electrodes for applying an oscillating electric field to excite ions in the system. Detection circuitry including detection electrodes measures a detection signal which includes a plurality of signal values including signal values induced by the ions. Structure is provided for reducing or canceling coupling of the excitation signal into the detection signal, wherein simultaneous excitation and detection is used. A computing structure generates a Fourier transformed frequency

domain representation of the detection signal and deconvolves the frequency domain representation using complex division to separate a dispersion spectrum portion and an absorption spectrum portion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:206491 USPATFULL
TITLE: High resolution fourier transform ion cyclotron resonance (FT-ICR) mass spectrometry methods and apparatus
INVENTOR(S): Beu, Steven C., Austin, TX, UNITED STATES
Blakney, Greg T., Tallahassee, FL, UNITED STATES
Quinn, John P., Havana, FL, UNITED STATES
Hendrickson, Christopher L., Tallahassee, FL, UNITED STATES
Marshall, Alan G., Tallahassee, FL, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005178961	A1	20050818	
APPLICATION INFO.:	US 2005-51092	A1	20050204	(11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-542213P	20040205 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: AKERMAN SENTERFITT, P.O. BOX 3188, WEST PALM BEACH, FL, 33402-3188, US
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 34 OF 1264 USPATFULL on STN
TI System and methods for product and document authentication
AB The present invention relates to both a system and method for product and document authentication. The system used herein comprises one or more inks, at least one of which is either invisible to the naked eye or is fluorescent or luminescent, an optical (2, 3, 8) scanning component capable of detecting the signals emitted by all of said inks, and an information technology component for analyzing said signals. Given the large number of combinations of dyes, sizes and shapes of the markings made with said dyes, the ability to change the type, size and shape for the marking (5) for a given product, and the ability to keep track of the dyes and markings used for a given product, the system allows a nearly foolproof system for product authentication. The method involves the above system, or other combinations of inks, for authenticating a given product.

ACCESSION NUMBER: 2005:206371 USPATFULL
TITLE: System and methods for product and document authentication
INVENTOR(S): Jones, Guilford II, Canton, MA, UNITED STATES
Burke, Shawn, Andover, MA, UNITED STATES
McDonald, Peter, Natick, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005178841	A1	20050818	
APPLICATION INFO.:	US 2003-517299	A1	20020607	(10)
	WO 2002-US17866		20020607	

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WEINGARTEN, SCHURGIN, GAGNEBIN & LEBOVICI LLP, TEN POST OFFICE SQUARE, BOSTON, MA, 02109, US
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 1269

L4 ANSWER 35 OF 1264 USPATFULL on STN
TI Intracellular signaling molecules
AB Various embodiments of the invention provide human intracellular signaling molecules (INTSIG) and polynucleotides which identify and encode INTSIG. Embodiments of the invention also provide expression vectors, host cells, antibodies, agonists, and antagonists. Other embodiments provide methods for diagnosing, treating, or preventing disorders associated with aberrant expression of INTSIG.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:203518 USPATFULL
TITLE: Intracellular signaling molecules
INVENTOR(S): Yue, Henry, Sunnyvale, CA, UNITED STATES
Lu, Dyung Aina, San Jose, CA, UNITED STATES
Swarnakar, Anita, San Francisco, CA, UNITED STATES
Tang, Y. Tom, San Jose, CA, UNITED STATES
Griffin, Jennifer A., Fremont, CA, UNITED STATES
Emerling, Brooke M., Chicago, IL, UNITED STATES
Forsythe, Ian J., Edmonton, CA, UNITED STATES
Yao, Monique G., Mountain View, CA, UNITED STATES
Ramkumar, Jayalaxmi, Fremont, CA, UNITED STATES
Richardson, Thomas W., Redwood City, CA, UNITED STATES
Becha, Shanya D., San Francisco, CA, UNITED STATES
Lee, Ernestine A., Kensington, CA, UNITED STATES
Warren, Bridget A, San Marcos, CA, UNITED STATES
Lehr-Mason, Patricia M., Morgan Hill, CA, UNITED STATES
Baughn, Mariah R., Los Angeles, CA, UNITED STATES
Li, Joana X, Millbrae, CA, UNITED STATES
Duggan, Brendan M, Sunnyvale, CA, UNITED STATES
Gietzen, Kimberly J, San Jose, CA, UNITED STATES
Lal, Preeti G, Santa Clara, CA, UNITED STATES
Borowsky, Mark L, Needham, MA, UNITED STATES
Ison, Craig H., San Jose, CA, UNITED STATES
Thangavelu, Kavitha, Sunnyvale, CA, UNITED STATES
Xu, Yuming, Mountain View, CA, UNITED STATES
Lee, Sally, San Jose, CA, UNITED STATES
Elliott, Vicki S., San Jose, CA, UNITED STATES
Sprague, William W., Sacramento, CA, UNITED STATES
Azimzai, Yalda, Oakland, CA, UNITED STATES
Hafalia, April J A, Daly City, CA, UNITED STATES
Ding, Li, Creve Coeur, MO, UNITED STATES
Nguyen, Danniel B, San Jose, CA, UNITED STATES
Honchell, Cynthia D., San Francisco, CA, UNITED STATES
Luo, Wen, San Diego, CA, UNITED STATES
Chawla, Narinder K., Union City, CA, UNITED STATES
Marquis, Joseph P., San Jose, CA, UNITED STATES
Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES
Tran, Uyen K., San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005176944	A1	20050811	
APPLICATION INFO.:	US 2003-487092	A1	20020816	(10)
	WO 2002-US26322		20020816	

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-313245P	20010817 (60)
	US 2003-314751P	20010824 (60)
	US 2003-316752P	20010831 (60)
	US 2003-316847P	20010831 (60)
	US 2003-322188P	20010914 (60)
	US 2003-326390P	20010928 (60)
	US 2003-328952P	20011012 (60)
	US 2003-345468P	20011019 (60)
	US 2003-372499P	20020412 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: INCYTE CORPORATION, EXPERIMENTAL STATION, ROUTE 141 & HENRY CLAY ROAD, BLDG. E336, WILMINGTON, DE, 19880, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
LINE COUNT: 16737
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 36 OF 1264 USPATFULL on STN
TI Methods and kits for screening nucleic acid duplex stability
AB Simple methods and kits for determining the thermodynamic stability of nucleic acid duplexes and single polynucleotide polymorphisms via competitive equilibria are provided.

ACCESSION NUMBER: 2005:202613 USPATFULL
TITLE: Methods and kits for screening nucleic acid duplex stability
INVENTOR(S): Breslauer, Kenneth J., Edison, NJ, UNITED STATES
Gelfand, Craig A., Jackson, NJ, UNITED STATES
Plum, G. Eric, Upper Arlington, OH, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005176032	A1	20050811
APPLICATION INFO.:	US 2004-983568	A1	20041108 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-869004, filed on 24 Jan 2002, GRANTED, Pat. No. US 6815163 A 371 of International Ser. No. WO 1999-US30751, filed on 23 Dec 1999

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-113731P	19981223 (60)
	US 1999-119909P	19990212 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307, US
NUMBER OF CLAIMS: 59
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1928

L4 ANSWER 37 OF 1264 USPATFULL on STN
TI Human RalGDS-like protein 3
AB The invention provides isolated nucleic acids that encode RGL3, and fragments thereof, vectors for propagating and expressing RGL3 nucleic acids, host cells comprising the nucleic acids and vectors of the present invention, proteins, protein fragments, and protein fusions of the novel RGL3 isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising human RGL3

nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous orthologue of the human RGL3 gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the RGL3 nucleic acids, proteins, and antibodies of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:202602 USPATFULL
TITLE:	Human RalGDS-like protein 3
INVENTOR(S):	Gu, Yizhong, Cupertino, CA, UNITED STATES Nguyen, Cung-Tuong, San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005176021	A1	20050811
APPLICATION INFO.:	US 2004-894680	A1	20040719 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-60990, filed on 30 Jan 2002, PENDING Continuation-in-part of Ser. No. WO 2001-US663, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US664, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US665, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US666, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US667, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US668, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US669, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US670, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. US 2001-864761, filed on 23 May 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-326105P	20010928 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	AMERSHAM BIOSCIENCES, PATENT DEPARTMENT, 800 CENTENNIAL AVENUE, PISCATAWAY, NJ, 08855, US
NUMBER OF CLAIMS:	21
EXEMPLARY CLAIM:	1-13
NUMBER OF DRAWINGS:	11 Drawing Page(s)
LINE COUNT:	4945

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 38 OF 1264 USPATFULL on STN

TI Fluorescent multiplex hpv pcr assays using multiple fluorophores

AB The present invention relates a fluorescent multiplex PCR assay for detecting the presence of an HPV subtype in a sample using multiple fluorophores to simultaneously detect a plurality of HPV genes of the same HPV subtype. The present invention also relates to primer pairs and probes specific to HPV subtypes for use in the methods of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:202568 USPATFULL
TITLE:	Fluorescent multiplex hpv pcr assays using multiple fluorophores
INVENTOR(S):	Jansen, Kathrin, Doylestown, PA, UNITED STATES Taddeo, Frank J., Royersford, PA, UNITED STATES Li, Weili, Lansdale, PA, UNITED STATES DiCello, Anthony C., Fort Washington, PA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005175987	A1	20050811	
APPLICATION INFO.:	US 2003-487749	A1	20020819	(10)
	WO 2002-US26964		20020819	

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-60314383	20010823

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCK AND CO., INC, P O BOX 2000, RAHWAY, NJ, 07065-0907, US
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 1487
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 39 OF 1264 USPATFULL on STN
TI Bimolecular optical probes
AB Compositions, methods, and kits for detecting and monitoring post-translational modification activities, including kinase or phosphatase activities, are described. The compositions typically include a peptide, a first detectable moiety, a first binding member, and a protease cleavage site. Modification of a composition by a post-translational modification enzyme, such as a kinase or phosphatase, alters the proteolytic sensitivity of the peptide, resulting in a change of a detectable property of the composition when it is associated noncovalently with a probe composition that includes a second binding member and a second detectable moiety. Panel assays for determining substrates or modulators of enzymatic activities are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:196300 USPATFULL
TITLE: Bimolecular optical probes
INVENTOR(S): Kupcho, Kevin R., Madison, WI, UNITED STATES
Vogel, Kurt, Madison, WI, UNITED STATES
Werner, Elizabeth A., Madison, WI, UNITED STATES
Beebe, Jane A., Elkhorn, WI, UNITED STATES
Klink, Tony A., Madison, WI, UNITED STATES
Lasky, David A., Madison, WI, UNITED STATES
Kleman-Leyer, Karen M., Madison, WI, UNITED STATES
Somberg, Richard, Ritchburg, WI, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005170442	A1	20050804	
APPLICATION INFO.:	US 2004-937042	A1	20040909	(10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2004-903529, filed on 29 Jul 2004, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-490771P	20030729 (60)
	US 2003-502377P	20030912 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US
NUMBER OF CLAIMS: 92
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 3827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 40 OF 1264 USPATFULL on STN
TI Detection of PRRSV
AB This invention provides compositions and methods for the detection of porcine reproductive and respiratory syndrome viruses (PRRSV). The invention provides oligonucleotides containing sequences complementary to those in ORF 7 and the 3'-UTR (untranslated region) of PRRSV which oligonucleotides may be used to detect the presence of PRRSV sequences, and thus the presence of PRRSV infection, by use of methods provided by the invention. The invention also provides articles of manufacture as well as kits comprising these oligonucleotides which may be used in the detection methods of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:196194 USPATFULL
TITLE: Detection of PRRSV
INVENTOR(S): Callahan, Johnny D., Severn, MD, UNITED STATES
Nelson, William Max, Potomac, MD, UNITED STATES
PATENT ASSIGNEE(S): Tetracore, Inc., Gaithersburg, MD, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005170335	A1	20050804	
APPLICATION INFO.:	US 2004-962305	A1	20041008	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-510375P	20031009	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 2281
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 41 OF 1264 USPATFULL on STN
TI Nanoparticle thermometry and pressure sensors
AB A nanoparticle fluorescence (or upconversion) sensor comprises an electromagnetic source, a sample and a detector. The electromagnetic source emits an excitation. The sample is positioned within the excitation. At least a portion of the sample is associated with a sensory material. The sensory material receives at least a portion of the excitation emitted by the electromagnetic source. The sensory material has a plurality of luminescent nanoparticles luminescing upon receipt of the excitation with luminance emitted by the luminescent nanoparticles changing based on at least one of temperature and pressure. The detector receives at least a portion of the luminance emitted by the luminescent nanoparticles and outputs a luminance signal indicative of such luminance. The luminescence signal is correlated into a signal indicative of the atmosphere adjacent to the sensory material.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:195207 USPATFULL
TITLE: Nanoparticle thermometry and pressure sensors
INVENTOR(S): Chen, Wei, Stillwater, OK, UNITED STATES
Wang, Shaopeng, Stillwater, OK, UNITED STATES

Westcott, Sarah, Stillwater, OK, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005169348	A1	20050804	
APPLICATION INFO.:	US 2003-460531	A1	20030612	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-388211P	20020612 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 1364
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 42 OF 1264 USPATFULL on STN
TI Method and apparatus for improved energy readout
AB Methods and device are provided for improved storage screen readout. In one embodiment, a storage screen readout device comprises a first wavelength source and a second wavelength source, means of collecting phosphorescence stimulated by the sources, and means of effecting relative motion between the sources and the screen in order to obtain image information. The first wavelength may be selected to pump signal on the screen to be more easily readout by said second wavelength source. The sources may direct energy sequentially onto the screen, simultaneously onto the screen, any combination of the two, or combinations with other sources.

ACCESSION NUMBER: 2005:193484 USPATFULL
TITLE: Method and apparatus for improved energy readout
INVENTOR(S): Mitchell, Christopher R., Pleasanton, CA, UNITED STATES
Smith, Jerel, Boulder Creek, CA, UNITED STATES
PATENT ASSIGNEE(S): ALARA, INC., Fremont, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005167622	A1	20050804	
APPLICATION INFO.:	US 2004-999318	A1	20041129	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-525819P	20031128 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506, US
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 874

L4 ANSWER 43 OF 1264 USPATFULL on STN
TI Imaging methods for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring dévices
AB Optical systems that provide for simultaneous images and spectra from an object, such as a tissue sample, an industrial object such as a computer

chip, or any other object that can be viewed with an optical system such as a microscope, endoscope, telescope or camera. In some embodiments, the systems provide multiple images corresponding to various desired wavelength ranges within an original image of the object, as well as, if desired, directional pointer(s) that can provide both an identification of the precise location from which a spectrum is being obtained, as well as enhancing the ability to point the device.

ACCESSION NUMBER: 2005:193483 USPATFULL
TITLE: Imaging methods for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices
INVENTOR(S): Zeng, Haishan, Vancouver, CANADA
Lam, Stephen, Vancouver, CANADA
Palcic, Branko Mihael, Vancouver, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005167621	A1	20050804
APPLICATION INFO.:	US 2005-57965	A1	20050214 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-28568, filed on 19 Dec 2001, GRANTED, Pat. No. US 6898458 Continuation-in-part of Ser. No. US 2000-741731, filed on 19 Dec 2000, GRANTED, Pat. No. US 6826424
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GRAYBEAL, JACKSON, HALEY LLP, 155 - 108TH AVENUE NE, SUITE 350, BELLEVUE, WA, 98004-5901, US
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1-85
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 3448

L4 ANSWER 44 OF 1264 USPATFULL on STN
TI Biophotonic sensors and methods of use thereof
AB The present invention provides novel biophotonic sensors that have molecular recognition with high sensitivity for target molecules. In one embodiment, the biophotonic sensors have capture moieties with high specificity for molecules of interest (target molecules) and biophotonic conjugates. The biophotonic conjugates exhibit a characteristic photonic activity only when a target molecule is bound. This characteristic photonic activity may include, but is not limited to, either a qualitative response or a measurable change in photonic characteristics upon interaction of the sensors with the target molecules. Methods are also provided for use of the biophotonic sensors to detect molecules of interest either in vitro, in vivo, or in situ.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:189404 USPATFULL
TITLE: Biophotonic sensors and methods of use thereof
INVENTOR(S): Bray, Terry L., Birmingham, AL, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005164316	A1	20050728	
APPLICATION INFO.:	US 2003-480963	A1	20020626	(10)
	WO 2002-US20287		20020626	

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-301380P	20010627 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BARNES & THORNBURG, 11 SOUTH MERIDIAN, INDIANAPOLIS, IN, 46204, US
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 498
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 45 OF 1264 USPATFULL on STN
TI Methods of detecting hcv genotype 1 (hcv-1) by using primers specific for the 5' non-coding region (ncr) of the hcv genome
AB The present invention provides a method of detecting HCV genotype 1 (HCV-1) in a sample which is based on the finding that the 5' non-coding region (NCR) of the HCV genome is conserved between HCV-1 quasi-species but not between other HCV subgroups. The method comprises subjecting the sample to an amplification reaction using at least one primer which anneals specifically to the 5' noncoding region (5' NCR) of the HCV-1 genome, and detecting the product of the amplification reaction. Kits and primers suitable for carrying out the method are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:189255 USPATFULL
TITLE: Methods of detecting hcv genotype 1 (hcv-1) by using primers specific for the 5' non-coding region (ncr) of the hcv genome
INVENTOR(S): Rosenberg, William Malcolm Charles, Southampton, UNITED KINGDOM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005164165	A1	20050728	
APPLICATION INFO.:	US 2003-501262	A1	20030110	(10)
	WO 2003-GB64		20030110	

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2003-200526	20020111

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 46 OF 1264 USPATFULL on STN
TI Tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase as novel targets for herbicides
AB The present invention relates to tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase as novel targets for herbicides, to test methods for identifying herbicidally active inhibitors of one or more of the abovementioned enzymes, to the herbicidally active inhibitors identified by means of this method, and to methods for controlling undesired vegetation based on the inhibitors according to the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:183918 USPATFULL
TITLE: Tryptophan aminotransferase, indole-3-pyruvate decarboxylase and indole-3-acetaldehyde oxidase as

novel targets for herbicides

INVENTOR(S): Grossmann, Klaus, Neuhofen, GERMANY, FEDERAL REPUBLIC OF
Schiffer, Helmut, Grossfischlingen, GERMANY, FEDERAL REPUBLIC OF
Witschel, Matthias, Bad Durkheim, GERMANY, FEDERAL REPUBLIC OF
Zagar, Cyril, Mannheim, GERMANY, FEDERAL REPUBLIC OF
Rentzea, Costin, Heidelberg, GERMANY, FEDERAL REPUBLIC OF
Menges, Markus, Kassel, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005159312	A1	20050721	
APPLICATION INFO.:	US 2003-508837	A1	20030319	(10)
	WO 2003-EP2846		20030319	

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-102133328	20020325

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVAK DRUCE DELUCA & QUIGG, LLP, 1300 EYE STREET NW, SUITE 400 EAST, WASHINGTON, DC, 20005, US
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 47 OF 1264 USPATFULL on STN
TI Homo-doubly labeled compositions for the detection of enzyme activity in biological samples
AB The present invention provides for novel reagents whose fluorescence changes upon cleavage or a change in conformation of a backbone. The reagents comprise a backbone (e.g. nucleic acid, polypeptide, etc.) joining two fluorophores of the same species whereby the fluorophores form an H-dimer resulting in quenching of the fluorescence of the fluorophores. When the backbone is cleaved or changes conformation, the fluorophores are separated, no longer forming an H-type dimer, and are de-quenched thereby providing a detectable signal. The use of a single fluorophore rather than an "acceptor-donor" fluoresecence resonance energy transfer system offers synthesis and performance advantages.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:183379 USPATFULL
TITLE: Homo-doubly labeled compositions for the detection of enzyme activity in biological samples
INVENTOR(S): Packard, Beverly, Rockville, MD, UNITED STATES
Komoriya, Akira, Rockville, MD, UNITED STATES
PATENT ASSIGNEE(S): Oncolmmunin, Inc. (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005158766	A1	20050721	
APPLICATION INFO.:	US 2004-15864	A1	20041215	(11)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-747287, filed on 22 Dec 2000, GRANTED, Pat. No. US 6893868 Continuation-in-part of Ser. No. US 1999-394019, filed on 10 Sep 1999, PENDING Continuation-in-part of Ser. No. US 1997-802981, filed on 20 Feb 1997, GRANTED, Pat. No. US 6037137 Continuation-in-part of Ser. No. WO 2000-US24882, filed on 11 Sep 2000, PENDING

Continuation of Ser. No. US 1999-394019, filed on 10 Sep 1999, PENDING Continuation-in-part of Ser. No. US 1997-802981, filed on 20 Feb 1997, GRANTED, Pat. No. US 6037137
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501, US
NUMBER OF CLAIMS: 52
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 3342
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 48 OF 1264 USPATFULL on STN
TI Methods and compositions related to tagging of membrane surface proteins
AB This invention relates to methods and reagents for selectively labeling membrane surface proteins using a labeling agent. The label may be used to isolate preparations of membrane surface proteins. Preparations of membrane surface proteins may be analysed by a variety of high-throughput techniques to allow rapid profiling of membrane surface protein composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:183323 USPATFULL
TITLE: Methods and compositions related to tagging of membrane surface proteins
INVENTOR(S): Alroy, Iris, Ness-Ziona, ISRAEL
Moskowitz, Haim, Jerusalem, ISRAEL
Reiss, Yuval, Kirlat-Ono, ISRAEL
Shoham, Benjamin A., Nes Ziona, ISRAEL

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005158708	A1	20050721	
APPLICATION INFO.:	US 2003-480149	A1	20020606	(10)
	WO 2002-US18000		20020606	

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-296334P	20010606 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624, US
NUMBER OF CLAIMS: 68
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2642
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 49 OF 1264 USPATFULL on STN
TI Tuning of nuclear magnetic resonance logging tools
AB A method for tuning a nuclear magnetic resonance (NMR) tool having an operating frequency and equipped with an antenna, is disclosed comprising: (a) transmitting a rf magnetic field to a sample under investigation; (b) receiving an NMR signal from the sample within a detection window; (c) determining mistuning of said antenna relative to said operating frequency; (d) analyzing the received echo signal to determine mistuning of the received signal from the operating frequency. The mistuning of the received signals from the operating frequency may be determined by analyzing any changes in phase of the echo along the echo signal. The antenna tuning process may be automated by measuring

calibrated signal amplitudes at more than one frequency and identifying a maximum amplitude. The system tuning may be maintained by repeating (a) through-(d) while operating the tool and implementing a feedback loop.

ACCESSION NUMBER: 2005:181212 USPATFULL
TITLE: Tuning of nuclear magnetic resonance logging tools
INVENTOR(S): Bordon, Ernesto, Houston, TX, UNITED STATES
Hurlimann, Martin D., Ridgefield, CT, UNITED STATES
Minh, Chanh Cao, Katy, TX, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005156592	A1	20050721	
APPLICATION INFO.:	US 2003-742481	A1	20031219	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SCHLUMBERGER-DOLL RESEARCH, 36 OLD QUARRY ROAD, RIDGEFIELD, CT, 06877-4108, US
NUMBER OF CLAIMS: 58
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 981

L4 ANSWER 50 OF 1264 USPATFULL on STN
TI Bacteriophage displaying aβ epitopes and method of use
AB A method of immunizing against plaque forming diseases using display technology is provided. The method utilize novel agents, or pharmaceutical compositions for vaccination against plaque forming diseases which rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compositions for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:179473 USPATFULL
TITLE: Bacteriophage displaying aβ epitopes and method of use
INVENTOR(S): Solomon, Beka, Herzlia, ISRAEL
Frenkel, Dan, Rehovot, ISRAEL
Hanan, Eilat, Tel Aviv, ISRAEL
PATENT ASSIGNEE(S): Ramot at Tel Aviv University Ltd., Tel Aviv, ISRAEL (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6919075	B1	20050719	
	WO 2001018169		20010315	
APPLICATION INFO.:	US 2001-830954		20000831	(9)
	WO 2000-IL518		20000831	
			20010807	PCT 371 date

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Kemmerer, Elizabeth C.
ASSISTANT EXAMINER: Nichols, Christopher James
LEGAL REPRESENTATIVE: Browdy and Neimark, P.L.L.C.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 49 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 3042
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 51 OF 1264 USPATFULL on STN
TI Compositions and methods comprising a ligand of chemerinR
AB The present invention relates to a G-protein coupled receptor and a novel ligand therefor. The invention provides screeing assays for the identification of candidate compounds which modulate the activity of the G-protein coupled receptor, as well as assays useful for the diagnosis and treatment of a disease or disorder related to the dysregulation of G-protein coupled receptor signaling.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:179008 USPATFULL
TITLE:	Compositions and methods comprising a ligand of chemerinR
INVENTOR(S):	Wittamer, Valerie, UNITED STATES Mirjolet, J. F., UNITED STATES Migeotte, Isabelle, UNITED STATES Communi, David, UNITED STATES Mantovani, Alberto, UNITED STATES Vulcano, Marisa, UNITED STATES Franssen, Jean-Denis, UNITED STATES Brezillon, Stephane, UNITED STATES Detheux, Michel, UNITED STATES Vassart, Gilbert, UNITED STATES Parmentier, Marc, UNITED STATES Le Poul, Emmanuel, UNITED STATES Loison, Cecile, UNITED STATES Ooms, Frederic, UNITED STATES Sozzani, Silvano, UNITED STATES
PATENT ASSIGNEE(S):	Euroscreen s.a. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005155090	A1	20050714
APPLICATION INFO.:	US 2004-893485	A1	20040716 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-603566, filed on 25 Jun 2003, PENDING Continuation-in-part of Ser. No. US 2002-201187, filed on 23 Jul 2002, ABANDONED Continuation-in-part of Ser. No. WO 2002-EP7647, filed on 9 Jul 2002, UNKNOWN Continuation-in-part of Ser. No. US 2001-905253, filed on 13 Jul 2001, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-303858P	20010709 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199, US
NUMBER OF CLAIMS:	21
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	41 Drawing Page(s)
LINE COUNT:	4314

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 52 OF 1264 USPATFULL on STN
TI Fluorogenic enzyme substrates and uses thereof
AB The present invention provides, inter alia, fluorogenic enzyme substrates, such as fluorogenic polypeptide substrates, libraries of fluorogenic enzyme substrates and methods for assaying for enzymatically active enzymes, such as hydrolases (e.g., proteases), in biological samples.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:177226 USPATFULL
TITLE: Fluorogenic enzyme substrates and uses thereof
INVENTOR(S): Harris, Jennifer L., San Diego, CA, UNITED STATES
Damoiseaux, Robert, Escondido, CA, UNITED STATES
Backes, Bradley J., Chicago, IL, UNITED STATES
Winssinger, Nicolas, La Jolla, CA, UNITED STATES
PATENT ASSIGNEE(S): IRM LLC, Hamilton, BERMUDA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005153306	A1	20050714
APPLICATION INFO.:	US 2004-892402	A1	20040714 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-487464P	20030714 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US
NUMBER OF CLAIMS: 68
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 2860
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 53 OF 1264 USPATFULL on STN
TI Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases
AB A method of immunizing against plaque forming diseases using display technology is provided. The method utilizes novel agents, or pharmaceutical compositions for vaccination against plaque forming diseases that rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compositions for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:176798 USPATFULL
TITLE: Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases
INVENTOR(S): Solomon, Beka, Herzlia, ISRAEL
Frenkel, Dan, Rehovot, ISRAEL
Hanan, Eilat, Tel Aviv, ISRAEL
PATENT ASSIGNEE(S): Ramot at Tel-Aviv University Ltd., Tel Aviv, ISRAEL (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005152878	A1	20050714
APPLICATION INFO.:	US 2005-73526	A1	20050308 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-830954, filed on 7 Aug 2001, PENDING A 371 of International Ser. No. WO 2000-IL518, filed on 31 Aug 2000 Continuation of Ser. No. US 2000-629971, filed on 31 Jul 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-473653, filed on 29 Dec 1999, GRANTED, Pat. No. US 6703015

	NUMBER	DATE

PRIORITY INFORMATION:	US 1999-152417P 19990903 (60)
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300, WASHINGTON, DC, 20001-5303, US
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	20 Drawing Page(s)
LINE COUNT:	2921

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 54 OF 1264 USPATFULL on STN

TI Porous gas sensors and method of preparation thereof

AB A sensor is disclosed. A representative sensor includes a silicon substrate having a porous silicon region. A portion of the porous silicon region has a front contact is disposed thereon. The contact resistance between the porous silicon region and the front contact is between about 10 ohms and 100 ohms.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:175141 USPATFULL
TITLE:	Porous gas sensors and method of preparation thereof
INVENTOR(S):	Gole, James L., Atlanta, GA, UNITED STATES Seals, Lenward T., Atlanta, GA, UNITED STATES Hesketh, Peter J., Atlanta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005151214	A1	20050714
APPLICATION INFO.:	US 2005-41358	A1	20050124 (11)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 2003-633259, filed on 1 Aug 2003, GRANTED, Pat. No. US 6893892 Continuation-in-part of Ser. No. US 2001-820412, filed on 29 Mar 2001, GRANTED, Pat. No. US 6589883
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	THOMAS, KAYDEN, HORSTEMEYER, & RISLEY, L.L.P., Suite 1750, 100 Galleria Parkway, N.W., Atlanta, GA, 30339-5948, US
NUMBER OF CLAIMS:	18
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	4 Drawing Page(s)
LINE COUNT:	1432

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 55 OF 1264 USPATFULL on STN

TI Thermal reaction device and method for using the same

AB An M+N matrix microfluidic device for performing a matrix of reactions, the device having a plurality of reaction cells in communication with one of either a sample inlet or a reagent inlet through a via formed within an elastomeric block of the device. Methods provided include a method for forming vias in parallel in an elastomeric layer of an elastomeric block of a microfluidic device, the method comprising using patterned photoresist masks and etching reagents to etch away regions or portions of an elastomeric layer of the elastomeric block.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:168758 USPATFULL
TITLE:	Thermal reaction device and method for using the same
INVENTOR(S):	Goodsaid, Federico, Laytonsville, MD, UNITED STATES Unger, Marc, San Mateo, CA, UNITED STATES

Huang, Jiang, San Jose, CA, UNITED STATES
Quan, Emerson, South San Francisco, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005145496	A1	20050707
APPLICATION INFO.:	US 2004-876046	A1	20040623 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2004-837885, filed on 2 May 2004, PENDING Continuation-in-part of Ser. No. US 2004-818642, filed on 5 Apr 2004, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460634P	20030403 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 2811
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 56 OF 1264 USPATFULL on STN
TI Depth-resolved fluorescence instrument with angled excitation
AB A fluorescence instrument illuminates the surface of tissue with light of a selected wavelength and light emanating from the tissue due to fluorescence is collected. The angle of illumination of tissue surface and/or collection of fluorescence is changed to probe at various depths beneath the surface of the tissue for a fluorescence layer. Three embodiments of the instrument are described.

ACCESSION NUMBER: 2005:166237 USPATFULL
TITLE: Depth-resolved fluorescence instrument with angled excitation
INVENTOR(S): Liu, Quan, Madison, WI, UNITED STATES
Ramanujam, Nirmala, Madison, WI, UNITED STATES
Zhu, Changfang, Madison, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005143663	A1	20050630
APPLICATION INFO.:	US 2004-986605	A1	20041112 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-322907, filed on 18 Dec 2002, GRANTED, Pat. No. US 6825928

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-341971P	20011219 (60)
	US 2002-370134P	20020405 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: QUARLES & BRADY LLP, 411 E. WISCONSIN AVENUE, SUITE 2040, MILWAUKEE, WI, 53202-4497, US
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 849

L4 ANSWER 57 OF 1264 USPATFULL on STN
TI SENSOR PROTEIN AND USE THEREOF
AB The object of the present invention is to utilize, as a sensor protein,

a molecular recognizing ability of a protein that scarcely undergoes any structural change by the binding of a target substance. According to the present invention, there is provided a sensor protein comprising an insert-type fusion protein composed of a reporter protein and a biding protein wherein said binding protein is inserted into the amino acid sequence of said reporter protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:165199 USPATFULL
TITLE:	SENSOR PROTEIN AND USE THEREOF
INVENTOR(S):	Yanagawa, Hiroshi, Aiko-gun, JAPAN Doi, Nobuhide, Yokohama-shi, JAPAN Nemoto, Naoto, Tokyo, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005142623	A1	20050630	
APPLICATION INFO.:	US 2001-853939	A1	20010511	(9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No.. WO 1999-JP6261, filed on 10 Nov 1999, UNKNOWN			

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-320102	19981111

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US
NUMBER OF CLAIMS:	27
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	6 Drawing Page(s)
LINE COUNT:	1175

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 58 OF 1264 USPATFULL on STN

TI Microrna as ligands and target molecules

AB The present invention provides methods for the identification of target molecules that bind to ligands, particularly microRNA ligands and mimics thereof and/or microRNA target molecules and mimics thereof, with as little as millimolar (mM) affinity using mass spectrometry. The methods may be used to determine the mode of binding interaction between two or more of these target molecules to the ligand as well as their relative affinities. Also provided are methods for designing compounds having greater affinity to a ligand by identifying two or more target molecules using mass spectrometry methods of the invention and linking the target molecules together to form a novel compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:165157 USPATFULL
TITLE:	Microrna as ligands and target molecules
INVENTOR(S):	Griffey, Richard H., Vista, CA, UNITED STATES Bennett, C. Frank, Carlsbad, CA, UNITED STATES Ecker, David J., Encinitas, CA, UNITED STATES Ward, Donna T., Carlsbad, CA, UNITED STATES Freier, Susan M., San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005142581	A1	20050630	
APPLICATION INFO.:	US 2004-934798	A1	20040903	(10)

	NUMBER	DATE

PRIORITY INFORMATION: US 2003-500724P 20030904 (60)
US 2003-502007P 20030911 (60)
US 2003-500732P 20030904 (60)
US 2003-502076P 20030911 (60)
US 2003-500723P 20030904 (60)
US 2003-500824P 20030904 (60)
US 2003-500730P 20030904 (60)
US 2003-504495P 20030917 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508, US
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 12680
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 59 OF 1264 USPATFULL on STN
TI Serine hydroxymethyltransferase as a target for herbicides
AB The present invention relates to serine hydroxymethyltransferase (E.C. 2.1.2.1) as novel target for herbicides, and to nucleic acid sequences encoding a polypeptide with the biological activity of a serine hydroxymethyltransferase, which, when not present, bring about growth retardation symptoms and chlorotic leaves, comprising the nucleic acid sequence SEQ ID No:3, and functional equivalents of the abovementioned nucleic acid sequence or the nucleic acid sequence SEQ ID NO:7 and functional equivalents of the abovementioned nucleic acid sequence. Moreover, the present invention relates to the use of the abovementioned nucleic acid sequences, of functional analogs of the SEQ ID NO:3 or SEQ ID NO:7 or of polypeptides encoded by one of the abovementioned nucleic acid sequences in a method for identifying herbicidally active compounds which inhibit serine hydroxymethyltransferases, and to the use of these compounds which have been identified by the method as herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:165129 USPATFULL
TITLE: Serine hydroxymethyltransferase as a target for herbicides
INVENTOR(S): Sonnewald, Uwe, Quedlinburg, GERMANY, FEDERAL REPUBLIC OF
Bornke, Frederik, Quedlinburg, GERMANY, FEDERAL REPUBLIC OF
Deist, Kirsten, Westdorf, GERMANY, FEDERAL REPUBLIC OF
Nigel, Marc Stitt, Potsdam, GERMANY, FEDERAL REPUBLIC OF
Lein, Wolfgang, Potsdam, GERMANY, FEDERAL REPUBLIC OF
Ehrhardt, Thomas, Speyer, GERMANY, FEDERAL REPUBLIC OF
Reindl, Andreas, Mannheim, GERMANY, FEDERAL REPUBLIC OF
Schmidt, Ralf-Michael, Kirrweiler, GERMANY, FEDERAL REPUBLIC OF
Freund, Annette, Limburgerhof, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005142553	A1	20050630	
APPLICATION INFO.:	US 2003-507989	A1	20030313	(10)
	WO 2003-EP2574		20030313	

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10212469	20020320

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROTHWELL, FIGG, ERNST & MANBECK, P.C., 1425 K STREET, N.W., SUITE 800, WASHINGTON, DC, 20005, US
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1-26
LINE COUNT: 2567
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 60 OF 1264 USPATFULL on STN
TI Embryonic epithelial cells
AB A population of embryonic epithelial cells produced in vitro from embryonic stem cells. In one embodiment, at least 45% of the cells express cytokeratin, for example, cytokeratin-7.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:158328 USPATFULL
TITLE: Embryonic epithelial cells
INVENTOR(S): Anderson, Daniel G., Framingham, MA, UNITED STATES
Levenberg, Shulamit, Haifa, ISRAEL
Langer, Robert S., Newton, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005136536	A1	20050623	
APPLICATION INFO.:	US 2004-941390	A1	20040915	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-570187P	20040512	(60)
	US 2003-503165P	20030915	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CHOATE, HALL & STEWART LLP, EXCHANGE PLACE, 53 STATE STREET, BOSTON, MA, 02109, US
NUMBER OF CLAIMS: 45
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 1572
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 61 OF 1264 USPATFULL on STN
TI Fluorescent pH indicators for intracellular assays
AB Systems, including compositions and methods, for measuring pH, particularly in cells, organelles, and other samples. The compositions include pH-sensitive fluorescent and fluorogenic 2',7'-dialkylfluorescein derivatives and associated nonfluorescent precursor compounds. The compositions may permit ratiometric measurement in the **excitation spectrum** and the emission spectrum. The methods include adding a precursor compound to a sample cell, incubating the sample cell to release the free indicator, illuminating the sample cell, and detecting the fluorescence response of the free indicator.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:158295 USPATFULL
TITLE: Fluorescent pH indicators for intracellular assays
INVENTOR(S): Diwu, Zhenjun, Sunnyvale, CA, UNITED STATES
Twu, Jesse J., Cupertino, CA, UNITED STATES
Yi, Guoliang, Sunnyvale, CA, UNITED STATES
Lavis, Luke D., Sunnyvale, CA, UNITED STATES
Chen, Yen-Wen, San Francisco, CA, UNITED STATES
Cassutt, Kelly J., Somerset, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136503	A1	20050623
APPLICATION INFO.:	US 2004-958670	A1	20041004 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-108656, filed on 27 Mar 2002, GRANTED, Pat. No. US 6800765

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-309800P	20010802 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KOLISCH HARTWELL, P.C., 520 S.W. YAMHILL STREET, SUITE 200, PORTLAND, OR, 97204, US
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1160
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 62 OF 1264 USPATFULL on STN
TI Photon reducing agents for fluorescence assays
AB The present invention provides a method for reducing undesirable light emission from a sample using at least one photon producing agent and at least one photon reducing agent (e.g. dye-based photon reducing agents). The present invention further provides a method for reducing undesirable light emission from a sample (e.g., a biochemical or cellular sample) with at least one photon producing agent and at least one collisional quencher. The present invention also provides a method for reducing undesirable light emission from a sample (e.g., a biochemical or cellular sample) with at least one photon producing agent and at least one quencher, such as an electronic quencher. The present invention also provides a system and method of screening test chemicals in fluorescent assays using photon reducing agents. The present invention also provides compositions, pharmaceutical compositions, and kits for practicing these methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:158261 USPATFULL
TITLE: Photon reducing agents for fluorescence assays
INVENTOR(S): Knapp, Tom, Carlsbad, CA, UNITED STATES
Zlokarnik, Gregor, La Jolla, CA, UNITED STATES
Negulescu, Paul, Del Mar, CA, UNITED STATES
Tsien, Roger Y., La Jolla, CA, UNITED STATES
Rink, Timothy James, Rue Honore Labande, MONACO
PATENT ASSIGNEE(S): Invitrogen Corporation, a Delaware corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005136469	A1	20050623
APPLICATION INFO.:	US 2005-47074	A1	20050131 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-759629, filed on 12 Jan 2001, PENDING Continuation of Ser. No. US 1998-122477, filed on 23 Jul 1998, GRANTED, Pat. No. US 6221612

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-54519P	19970801 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN,

55440-1022, US
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1-73
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 2128
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 63 OF 1264 USPATFULL on STN
TI Gene products differentially expressed in cancerous cells and their methods of use V
AB The present invention provides polynucleotides, as well as polypeptides encoded thereby, that are differentially expressed in cancer cells. These polynucleotides are useful in a variety of diagnostic and therapeutic methods. The present invention further provides methods of reducing growth of cancer cells. These methods are useful for treating cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:152012 USPATFULL
TITLE: Gene products differentially expressed in cancerous cells and their methods of use V
INVENTOR(S): Reinhard, Christoph, Emeryville, CA, UNITED STATES
Jefferson, Anne Bennett, Emeryville, CA, UNITED STATES
Chan, Vivien W., Emeryville, CA, UNITED STATES
Kaufmann, Joerg, Emeryville, CA, UNITED STATES
Xin, Hong, Emeryville, CA, UNITED STATES
Kennedy, Giulia C., Emeryville, CA, UNITED STATES
Harrowe, Greg, Emeryville, CA, UNITED STATES
Khoja, Hamiduddin, Emeryville, CA, UNITED STATES
Shyamala, Venkatakrishna, Emeryville, CA, UNITED STATES
PATENT ASSIGNEE(S): Chiron Corporation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005130926	A1	20050616
APPLICATION INFO.:	US 2004-977087	A1	20041028 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-81119, filed on 21 Feb 2002, PENDING Continuation-in-part of Ser. No. US 2003-360848, filed on 6 Feb 2003, ABANDONED Continuation of Ser. No. US 2000-570593, filed on 12 May 2000, GRANTED, Pat. No. US 6566063 Continuation-in-part of Ser. No. US 2004-763692, filed on 22 Jan 2004, PENDING Continuation of Ser. No. US 2000-626301, filed on 25 Jul 2000, GRANTED, Pat. No. US 6743602 Continuation-in-part of Ser. No. US 2003-698959, filed on 30 Oct 2003, PENDING Continuation of Ser. No. US 1999-433360, filed on 3 Nov 1999, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-271254P	20010221 (60)
	US 1999-134112P	19990514 (60)
	US 1999-145612P	19990726 (60)
	US 1999-148936P	19990813 (60)
	US 1998-107112P	19981104 (60)
	US 1999-114856P	19990106 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097, US
NUMBER OF CLAIMS: 71
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 41 Drawing Page(s)
LINE COUNT: 12744
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 64 OF 1264 USPATFULL on STN
TI Human testis expressed patched like protein
AB The invention provides isolated nucleic acids that encode HTPL, including two isoforms, and fragments thereof, vectors for propagating and expressing HTPL nucleic acids, host cells comprising the nucleic acids and vectors of the present invention, proteins, protein fragments, and protein fusions of the novel HTPL isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising human HTPL nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous orthologue of the human HTPL gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the HTPL nucleic acids, proteins, and antibodies of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:150772 USPATFULL
TITLE: Human testis expressed patched like protein
INVENTOR(S): Zhang, Jian, San Mateo, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005129683	A1	20050616
APPLICATION INFO.:	US 2004-890776	A1	20040714 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-60756, filed on 30 Jan 2002, PENDING Continuation-in-part of Ser. No. WO 2001-US663, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US664, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US665, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US667, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US668, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. WO 2001-US669, filed on 30 Jan 2001, PENDING Continuation-in-part of Ser. No. US 2001-864761, filed on 23 May 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-327898P	20011009 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: AMERSHAM BIOSCIENCES, PATENT DEPARTMENT, 800 CENTENNIAL AVENUE, PISCATAWAY, NJ, 08855, US
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 4529
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 65 OF 1264 USPATFULL on STN
TI Microfluidic devices and methods of using same
AB A variety of elastomeric-based microfluidic devices and methods for using and manufacturing such devices are provided. Certain of the devices have arrays of reaction sites to facilitate high throughput analyses. Some devices also include reaction sites located at the end of blind channels at which reagents have been previously deposited during manufacture. The reagents become suspended once sample is introduced

into the reaction site. The devices can be utilized with a variety of heating devices and thus can be used in a variety of analyses requiring temperature control, including thermocycling applications such as nucleic acid amplification reactions, genotyping and gene expression analyses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:150670 USPATFULL
TITLE:	Microfluidic devices and methods of using same
INVENTOR(S):	McBride, Lincoln, Belmont, CA, UNITED STATES Unger, Marc, San Mateo, CA, UNITED STATES Lucero, Michael, South San Francisco, CA, UNITED STATES Nassef, Hany Ramez, San Mateo, CA, UNITED STATES Facer, Geoffrey, San Francisco, CA, UNITED STATES
PATENT ASSIGNEE(S):	Fluidigm Corporation, South San Francisco, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005129581	A1	20050616	
APPLICATION INFO.:	US 2004-818642	A1	20040405	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460634P	20030403 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	24 Drawing Page(s)
LINE COUNT:	2627

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 66 OF 1264 USPATFULL on STN

TI Bioluminescent bioreporter integrated circuit detection methods

AB Disclosed are monolithic bioelectronic devices comprising a bioreporter and an OASIC. These bioluminescent bioreporter integrated circuit are useful in detecting substances such as pollutants, explosives, and heavy-metals residing in inhospitable areas such as groundwater, industrial process vessels, and battlefields. Also disclosed are methods and apparatus for detection of particular analytes, including ammonia and estrogen compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:146588 USPATFULL
TITLE:	Bioluminescent bioreporter integrated circuit detection methods
INVENTOR(S):	Simpson, Michael L., Knoxville, TN, UNITED STATES Paulus, Michael J., Knoxville, TN, UNITED STATES Sayler, Gary S., Knoxville, TN, UNITED STATES Applegate, Bruce M., Knoxville, TN, UNITED STATES Ripp, Steven A., Knoxville, TN, UNITED STATES
PATENT ASSIGNEE(S):	UT-Battelle, LLC, Oak Ridge, TN, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6905834	B1	20050614	
APPLICATION INFO.:	US 2000-660581		20000912	(9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-978439, filed on 25 Nov 1997, Pat. No. US 6117643, issued on 12 Sep			

2000
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Chin, Christopher L.
LEGAL REPRESENTATIVE: Akerman Senterfitt
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 69 Drawing Figure(s); 54 Drawing Page(s)
LINE COUNT: 5101
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 67 OF 1264 USPATFULL on STN
TI Methods and compositions relating to single reactive center reagents
AB Methods of preparing single reactive center reagents are encompassed by the invention. The invention also includes compositions of single reactive center reagents and methods of use thereof for labeling and analyzing polymers such as nucleic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:144239 USPATFULL
TITLE: Methods and compositions relating to single reactive center reagents
INVENTOR(S): Gilmanshin, Rudolf, Waltham, MA, UNITED STATES
Hatch, Amie Jo, Worcester, MA, UNITED STATES
PATENT ASSIGNEE(S): U.S. Genomics, Inc., Woburn, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005123974	A1	20050609	
APPLICATION INFO.:	US 2004-991964	A1	20041117	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-520927P	20031117	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211, US
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1505
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 68 OF 1264 USPATFULL on STN
TI Lipoparticles comprising proteins, methods of making, and using the same
AB The present invention relates to lipoparticles. The invention also relates to producing lipoparticles. The invention further relates to lipoparticles comprising a viral structural protein. The invention further relates to a lipoparticle comprising a membrane protein, and the lipoparticle can be attached to a sensor surface. The invention further relates to methods of producing and using the lipoparticle to, inter alia, assess protein binding interactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:143828 USPATFULL
TITLE: Lipoparticles comprising proteins, methods of making, and using the same
INVENTOR(S): Doranz, Benjamin J., Narberth, PA, UNITED STATES
Willis, Sharon, Wayne, PA, UNITED STATES
Ross, Eric, Philadelphia, PA, UNITED STATES
Greene, Tiffani Anne, Cherry Hill, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005123563	A1	20050609
APPLICATION INFO.:	US 2004-901399	A1	20040728 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-491477P	20030730 (60)
	US 2003-491633P	20030730 (60)
	US 2003-498755P	20030829 (60)
	US 2003-502478P	20030912 (60)
	US 2003-509677P	20031007 (60)
	US 2003-509608P	20031007 (60)
	US 2003-509575P	20031007 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: COZEN O'CONNOR, P.C., 1900 MARKET STREET, PHILADELPHIA, PA, 19103-3508, US
NUMBER OF CLAIMS: 147
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Page(s)
LINE COUNT: 12584
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 69 OF 1264 USPATFULL on STN
TI System and method for detecting bioanalytes and method for producing a bioanalyte sensor
AB The present invention discloses an indicator protein, and a method for making such a fusion protien, having a first binding moiety having a binding domain specific for a class of analytes that undergoes a reproducible allosteric change in conformation when said analytes are reversibly bound; a second moiety and third moiety that are covalently linked to either side of the first binding moiety such that the second and third moieties undergo a change in relative position when an analyte of interest molecule binds to the binding moiety; and the second and third moieties undergo a change in optical properties when their relative positions change and that change can be monitored remotely by optical means. The present invention also discloses a system and method for detecting glucose that uses such a fusion protein in a variety of formats including a subcutaneously and in a bioreactor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:138077 USPATFULL
TITLE: System and method for detecting bioanalytes and method for producing a bioanalyte sensor
INVENTOR(S): Schultz, Jerome S., Pittsburgh, PA, UNITED STATES
Yi, Kaiming, Pittsburgh, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005118726	A1	20050602
APPLICATION INFO.:	US 2003-649433	A1	20030826 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-405920P	20020826 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Parrish Law Offices, Suite 200, 615 Washington Road, Pittsburgh, PA, 15228, US
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 475
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 70 OF 1264 USPATFULL on STN
TI Biological applications of quantum dots
AB The present invention provides a composition comprising fluorescent semiconductor nanocrystals associated to a compound, wherein the nanocrystals have a characteristic spectral emission, wherein said spectral emission is tunable to a desired wavelength by controlling the size of the nanocrystal, and wherein said emission provides information about a biological state or event.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:137984 USPATFULL
TITLE: Biological applications of quantum dots
INVENTOR(S): Bawendi, Moungi G., Boston, MA, UNITED STATES
Sundar, Vikram C., Stoneham, MA, UNITED STATES
Mikulec, Frederic V., La Jolla, CA, UNITED STATES
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005118631	A1	20050602
APPLICATION INFO.:	US 2004-979241	A1	20041103 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-832959, filed on 12 Apr 2001, GRANTED, Pat. No. US 6855551 Division of Ser. No. US 1998-160454, filed on 24 Sep 1998, GRANTED, Pat. No. US 6326144

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-100947P	19980918 (60)
	US 1998-101046P	19980918 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STEPTOE & JOHNSON LLP, 1330 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036, US
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1448
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 71 OF 1264 USPATFULL on STN
TI Color emission device
AB An organic EL element (200) emits light containing a blue component (B) and a component (θ) with a peak in 500 to 600 nm. A red converting member (360) has an **excitation spectrum** with a peak in 500 to 600 nm. The red converting member receives light from the organic EL element (200) and converts the blue component (B) to a red component (R). At this time, the luminance of the red component (R) is enhanced since the member (360) is strongly excited by the component (θ). As a result, the white balance of three colors is improved. Therefore a color emission device (100) can be provided where the intensity of red light is enhanced.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:135988 USPATFULL
TITLE: Color emission device
INVENTOR(S): Kuma, Hitoshi, Chiba, JAPAN
Eida, Mitsuru, Chiba, JAPAN

	Hosokawa, Chishio, Chiba, JAPAN Fukuoka, Kenichi, Chiba, JAPAN
PATENT ASSIGNEE(S):	Idemitsu Kosan Co. Ltd., Chiyoda-ku, Tokyo, JAPAN, 100-8321 (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005116619	A1	20050602	
APPLICATION INFO.:	US 2003-507843	A1	20030307	(10)
	WO 2003-JP2708		20030307	

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-2002073234	20020315
	JP 2003-2002073324	20020315
	JP 2003-2002097812	20020329

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	PARKHURST & WENDEL, L.L.P., 1421 PRINCE STREET, SUITE 210, ALEXANDRIA, VA, 22314-2805, US
NUMBER OF CLAIMS:	9
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	15 Drawing Page(s)
LINE COUNT:	2088

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 72 OF 1264 USPATFULL on STN

TI Performance measurement system with quantum dots for object identification

AB The present invention is directed to a monitor system that measures flight characteristics of at least one object moving in a predetermined field-of-view using at least one fluorescent marker. In one embodiment, the emission spectra of the fluorescent marker is preferably narrow and substantially symmetric. It may be desirable for the fluorescent marker to be capable of responding to a broad excitation spectra. Preferably, the fluorescent markers comprise quantum dots. The quantum dots may be manufactured in any desired manner, and may comprise semiconductors, gold atoms, and the like.

ACCESSION NUMBER:	2005:132604 USPATFULL
TITLE:	Performance measurement system with quantum dots for object identification
INVENTOR(S):	Gobush, William, North Dartmouth, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005114073	A1	20050526	
APPLICATION INFO.:	US 2004-999924	A1	20041201	(10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-2174, filed on 5 Dec 2001, PENDING			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	SWIDLER BERLIN LLP, 3000 K STREET, NW, BOX IP, WASHINGTON, DC, 20007, US			
NUMBER OF CLAIMS:	48			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	16 Drawing Page(s)			
LINE COUNT:	1252			

L4 ANSWER 73 OF 1264 USPATFULL on STN

TI Method for optical measurement of multi-stranded nucleic acid

AB A method for optical measurement of a multi-stranded nucleic acid which comprises the step of bringing a compound into contact with a

multi-stranded nucleic acid wherein said compound is capable of interacting with the multi-stranded nucleic acid, wherein the compound has the following properties: (a) the compound can exist in a substantially colorless and non-fluorescent state under at least one condition in an aqueous solution in the absence of the multi-stranded nucleic acid, and (b) when the multi-stranded nucleic acid is allowed to exist in the condition defined in the above (a), the compound changes to a substantially colored state based on an interaction with the multi-stranded nucleic acid and substantially expresses fluorescent property based on said interaction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:131309 USPATFULL
TITLE: Method for optical measurement of multi-stranded nucleic acid
INVENTOR(S): Nakamura, Kouki, Minami-ashigara-shi, JAPAN
Takeuchi, Kazuya, Minami-ashigara-shi, JAPAN
PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005112770	A1	20050526	
APPLICATION INFO.:	US 2003-366449	A1	20030214	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-36473	20020214
	JP 2002-36474	20020214

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213, US
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 2678
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 74 OF 1264 USPATFULL on STN
TI Fluorescein-based metal sensors, and methods of making and using the same
AB The present invention is directed, in part, to fluorescein-based ligands for detection of metal ions, and methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:131308 USPATFULL
TITLE: Fluorescein-based metal sensors, and methods of making and using the same
INVENTOR(S): Lippard, Stephen J., Cambridge, MA, UNITED STATES
Nolan, Elizabeth Marie, Cambridge, MA, UNITED STATES
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005112769	A1	20050526	
APPLICATION INFO.:	US 2004-928924	A1	20040827	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-500807P	20030905	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST,

155 SEAPORT BLVD, BOSTON, MA, 02110, US
NUMBER OF CLAIMS: 45
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 2105
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 75 OF 1264 USPATFULL on STN
TI Detection system
AB A method for detecting the presence of a target nucleic acid sequence in a sample, said method comprising: (a) adding to a sample suspected of containing said target nucleic acid sequence, a probe specific for said target sequence and DNA duplex binding agent, said probe comprising a reactive molecule able to absorb fluorescence from or donate fluorescent energy to said DNA duplex binding agent, (b) subjecting the thus formed mixture to an amplification reaction in which target nucleic acid is amplified, (c) subjecting said sample to conditions under which the said probe hybridizes to the target sequence, and (d) monitoring fluorescence from said sample. This method can be used for example to monitor amplification reactions such as PCR reactions, such that the amount of target sequence present in the sample may be determined. Additionally or alternatively, it may be used to generate duplex destabilization data such as melt hysteresis information for amplification monitoring or for detection and quantitation of polymorphisms or allelic variation, and so is useful in genetic diagnosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:131187 USPATFULL
TITLE: Detection system
INVENTOR(S): Lee, Martin A., Salisbury, UNITED KINGDOM
Fuerst, Roderick, Kimbolton, UNITED KINGDOM
PATENT ASSIGNEE(S): The Secretary of State for Defence, Hampshire, UNITED KINGDOM (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005112647	A1	20050526
APPLICATION INFO.:	US 2004-958377	A1	20041006 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-555123, filed on 25 May 2000, GRANTED, Pat. No. US 6833257 A 371 of International Ser. No. WO 1998-GB3560, filed on 27 Nov 1998

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1997-25197	19971129

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714, US
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 711
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 76 OF 1264 USPATFULL on STN
TI Methods and apparati using single polymer analysis
AB The invention relates to methods for analyzing and characterizing single polymers such as nucleic acid molecules. In preferred embodiments, the single molecules are analyzed using single molecule detection and analysis systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:131135 USPATFULL
TITLE:	Methods and apparati using single polymer analysis
INVENTOR(S):	Zhao, Xiaojian, Westford, MA, UNITED STATES Randall, Jeffrey D., Canton, MA, UNITED STATES Kundu, Bijit, Brookline, MA, UNITED STATES Kesty, Jessica, Seabrook, NH, UNITED STATES Gullans, Steven R., Natick, MA, UNITED STATES Chan, Eugene Y., Brookline, MA, UNITED STATES Fuchs, Martin, Uxbridge, MA, UNITED STATES Rooke, Jenny E., Somerville, MA, UNITED STATES
PATENT ASSIGNEE(S):	U.S. Genomics, Inc., Woburn, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005112595	A1	20050526
APPLICATION INFO.:	US 2004-773084	A1	20040205 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-448264, filed on 28 May 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-383968P	20020528 (60)
	US 2003-441337P	20030121 (60)
	US 2003-441334P	20030120 (60)
	US 2003-437892P	20030103 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Maria A. Trevisan, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210, US
NUMBER OF CLAIMS:	25
EXEMPLARY CLAIM:	1-136
NUMBER OF DRAWINGS:	39 Drawing Page(s)
LINE COUNT:	3023

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 77 OF 1264 USPATFULL on STN

TI Superresolving microscopy apparatus

AB In scanned optical systems such as confocal laser microscopes wherein a beam of light is focused to a spot in a specimen to excite a fluorescent species or other excitable species in the spot, the effective size of the excitation is made smaller than the size of the spot by providing a beam of light of wavelength adapted to quench the excitation of the excitable species, shaping this second beam into a pattern with a central intensity minimum, and overlapping this central minimum with the central intensity maximum of the focused spot, so that within the spot the intensity of quenching light increases with distance from the center of the spot, thereby preferentially quenching excitation in the peripheral parts of the spot, and thereby reducing the effective size of the excitation and thus improving the resolution of the system. In the preferred embodiment of the present invention, the central minimum of quenching light is narrowed further by creating the pattern of quenching radiation in the specimen by imaging onto the focal plane a plurality of pairs of sources of quenching light, arrayed at the vertices of a regular, even-sided polygon, the center of which is imaged in the specimen on the central maximum of exciting radiation, and such that the two members of each pair are on opposite vertices of the polygon and emit light mutually coherent and out-of-phase, and the light emitted by different pairs is incoherent with respect to each other. Optical fibers conduct both excitation light and quenching light to the microscope body, preventing transmission of vibration from the laser apparatus to the microscope, thereby avoiding degradation of resolution.

ACCESSION NUMBER: 2005:129639 USPATFULL
TITLE: Superresolving microscopy apparatus
INVENTOR(S): Baer, Stephen C., Cambridge, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005111089	A1	20050526	
APPLICATION INFO.:	US 2004-26837	A1	20041230	(11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-902902, filed on 9 Jul 2001, PENDING Continuation-in-part of Ser. No. US 1999-343057, filed on 29 Jun 1999, ABANDONED Continuation-in-part of Ser. No. US 1997-919382, filed on 28 Aug 1997, GRANTED, Pat. No. US 5952668 Continuation-in-part of Ser. No. US 1995-581185, filed on 29 Dec 1995, GRANTED, Pat. No. US 5777342 Continuation-in-part of Ser. No. US 1994-275967, filed on 15 Jul 1994, GRANTED, Pat. No. US 5866911
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Stephen C Baer, 10 Poplar Rd, Cambridge, MA, 02138, US
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 1479

L4 ANSWER 78 OF 1264 USPATFULL on STN
TI Fluorescent protein
AB An object of the present invention is to provide a novel fluorescent protein derived from organisms other than Aequorea victoria. According to the present invention, there is provided a fluorescent protein derived from Galaxea fascicularis, which has the following properties: (1) the molecular weight is approximately 27,000; (2) a tetramer is formed in an equilibration state; (3) the excitation maximum wavelength is 492 nm, and the fluorescence maximum wavelength is 505 nm; (4) the molar absorption coefficient is 74,100; (5) the quantum yield is 0.625; and (6) the pH sensitivity of the fluorescent property is low in the range between pH 5 and pH 12.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:124272 USPATFULL
TITLE: Fluorescent protein
INVENTOR(S): Miyawaki, Atsushi, Wako-shi, JAPAN
Karasawa, Satoshi, Tokyo, JAPAN
Araki, Toshio, Asaka-shi, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005106661	A1	20050519	
APPLICATION INFO.:	US 2003-492081	A1	20021010	(10)
	WO 2002-JP10529		20021010	

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-2001313780	20011011

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE PLACE, RESTON, VA, 20191, US
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 1054

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 79 OF 1264 USPATFULL on STN
TI ELECTROCHEMILUMINESCENT ASSAYS
AB Qualitative and quantitative electrochemiluminescent assays for analytes of interest present in multicomponent liquids are provided. These methods comprise contacting a sample with a reagent labeled with an electrochemiluminescent chemical moiety and capable of combining with the analyte of interest, exposing the resulting sample to electrochemical energy and detecting electromagnetic radiation emitted by the electrochemiluminescent chemical moiety. Further provided are methods for detecting and identifying the presence of a multiplicity of analytes in a liquid food or food homogenate. These methods comprise immersing a diagnostic reagent holder, provided with a multiplicity of reagents, into the food or food homogenate, removing the diagnostic reagent holder from the liquid food or food homogenate, and detecting and identifying the presence of a multiplicity of analytes of interest bound to the diagnostic reagent holder, thereby detecting and identifying the presence of a multiplicity of analytes of interest in the food or food homogenate. The invention further provides an enzyme immunoassay for coliform bacteria. This assay comprises inoculating a sample into a suitable medium for coliform reproduction, immobilizing coliforms present in the medium to a suitable surface, treating the surface with an antibody directed to the immobilized coliforms and detecting the presence of the immobilized coliforms immobilized to a suitable surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:124263 USPATFULL
TITLE:	ELECTROCHEMILUMINESCENT ASSAYS
INVENTOR(S):	Massey, Richard J., Rockville, MD, UNITED STATES Powell, Michael J., Rockville, MD, UNITED STATES Mied, Paul A., New Windsor, MD, UNITED STATES Feng, Peter, Rockville, MD, UNITED STATES Della Ciana, Leopoldo, Rockville, MD, UNITED STATES Dressick, Walter J., Rockville, MD, UNITED STATES Poonian, Mohindar S., Gaithersburg, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005106652	A1	20050519
	US 6916606	B2	20050712
APPLICATION INFO.:	US 2002-274079	A1	20021018 (10)

RELATED APPLN. INFO.:	Division of Ser. No. US 1995-415756, filed on 3 Apr 1995, ABANDONED Continuation of Ser. No. US 1994-195825, filed on 10 Feb 1994, ABANDONED Continuation of Ser. No. US 1987-369560, filed on 18 Dec 1987, ABANDONED Continuation-in-part of Ser. No. US 1986-858354, filed on 30 Apr 1986, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1987-US987	19870430

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 901 NEW YORK AVENUE, NW, WASHINGTON, DC, 20001-4413, US
NUMBER OF CLAIMS:	3
EXEMPLARY CLAIM:	1-156
NUMBER OF DRAWINGS:	13 Drawing Page(s)
LINE COUNT:	3991

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 80 OF 1264 USPATFULL on STN
TI Detection of group B streptococcus
AB The invention provides methods to detect group B streptococcus (GBS) in biological samples using real-time PCR. Primers and probes for the detection of GBS are provided by the invention. Articles of manufacture containing such primers and probes for detecting GBS are further provided by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:124189 USPATFULL			
TITLE:	Detection of group B streptococcus			
INVENTOR(S):	Uhl, James R., Rochester, MN, UNITED STATES Cockerill, Franklin R. III, Rochester, MN, UNITED STATES Aichinger, Christian, Munchen, DE, UNITED STATES Reiser, Astrid, Antdorf, GERMANY, FEDERAL REPUBLIC OF			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005106578	A1	20050519	
APPLICATION INFO.:	US 2003-716005	A1	20031118	(10)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402, US			
NUMBER OF CLAIMS:	36			
EXEMPLARY CLAIM:	1			
LINE COUNT:	1188			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 81 OF 1264 USPATFULL on STN
TI Cotton event PV-GHBK04 (757) and compositions and methods for detection thereof
AB The present invention provides a cotton event PV-GHBK04 (757), a cotton plant that contains PV-GHBK04 (757) DNA molecules and its progeny thereof, and methods for producing cotton event PV-GHBK04 (757). The present invention also provides assays for detecting the presence of the 757 cotton event DNA sequences in a sample based on the DNA sequence of the recombinant construct inserted into the cotton genome and of genomic sequences flanking the insertion site, and provides amplicons and sequences which are diagnostic for the presence of event 757 nucleic acids in a sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:119946 USPATFULL			
TITLE:	Cotton event PV-GHBK04 (757) and compositions and methods for detection thereof			
INVENTOR(S):	Hillyard, Jeanna R., St. Charles, MO, UNITED STATES Roberts, James K., Chesterfield, MO, UNITED STATES Ye, Minwei, Framingham, MA, UNITED STATES			
PATENT ASSIGNEE(S):	Monsanto Technology LLC, St. Louis, MO, UNITED STATES (U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6893826	B1	20050517	
APPLICATION INFO.:	US 2002-156653		20020528	(10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-990659, filed on 16 Nov 2001, ABANDONED			
	NUMBER	DATE		
PRIORITY INFORMATION:	US 2000-249757P	20001117	(60)	

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Horlick, Kenneth R.
ASSISTANT EXAMINER: Tung, Joyce
LEGAL REPRESENTATIVE: Ball, Esq., Timothy K.
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1881
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 82 OF 1264 USPATFULL on STN
TI Fluorescent proteins from aquatic species
AB Provided are four new fluorescent proteins. The proteins were derived from two wild-type fluorescent proteins: a red fluorescent protein (RFP) that was isolated from Actinodiscus or Discosoma sp. 1 and a green fluorescent protein (GFP) isolated from Montastraea cavernosa. Two mutant forms were generated from each wild-type protein. Each of the mutated forms has a higher fluorescence intensity than the respective wild-type form. The mutant forms of the fluorescent proteins allow for more sensitive detection of the fluorescence emitted by the proteins. Additionally, one of the mutant proteins is more resistant to photobleaching than its wild-type protein. The invention also encompasses isolated nucleic acids encoding the mutant forms of the wild-type RFP and GFP.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:117687 USPATFULL
TITLE: Fluorescent proteins from aquatic species
INVENTOR(S): Gibbs, Patrick D.L., Miami, FL, UNITED STATES
Carter, Robert W., Miami, FL, UNITED STATES
Schmale, Michael C., Miami, FL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005100954	A1	20050512
APPLICATION INFO.:	US 2004-21014	A1	20041223 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2002-314936, filed on 9 Dec 2002, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WHYTE HIRSCHBOECK DUDEK S C, 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 1160
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 83 OF 1264 USPATFULL on STN
TI Medical device for analyte monitoring and drug delivery
AB The invention relates to an ingestible, implantable or wearable medical device comprising a microarray which comprises a bioactive agent capable of interacting with a disease marker biological analyte; a reservoir which comprises at least one therapeutic agent and is capable of releasing the therapeutic agent(s) from the medical device; and a plurality of microchips comprising a microarray scanning device capable of obtaining physical parameter data of an interaction between the disease marker biological analyte with the bioactive agent; a biometric recognition device capable of comparing the physical parameter data with an analyte interaction profile; optionally a therapeutic agent releasing device capable of controlling release of the therapeutic agent from the reservoirs; an interface device capable of facilitating communications

between the microarray scanning device, biometric recognition device and the therapeutic agent releasing device; and an energy source to power the medical device. Specifically, the invention relates to a medical device capable of detecting an analyte in a bodily fluid comprising at least one microneedle capable of obtaining a sample of a bodily fluid, a first microchannel through which the sample flows and is in fluid communication with the at least one microneedle, a second microchannel in fluid communication with the first microchannel, through which a buffer flows, wherein the second channel comprises a microarray with a bioactive agent, a microarray scanning device to detect an interaction between the bioactive agent and the analyte in the bodily fluid; and an interface device.

ACCESSION NUMBER: 2005:117670 USPATFULL
TITLE: Medical device for analyte monitoring and drug delivery
INVENTOR(S): Holmes, Elizabeth A., Burlingame, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005100937	A1	20050512	
APPLICATION INFO.:	US 2004-937872	A1	20040910	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2003-501847P	20030911	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MCDERMOTT WILL & EMERY LLP, 600 13TH STREET, N.W., WASHINGTON, DC, 20005-3096, US
NUMBER OF CLAIMS: 74
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 1974

L4 ANSWER 84 OF 1264 USPATFULL on STN
TI Nucleic acid-based detection
AB The invention relates to compositions, systems, and methods for simultaneously detecting the presence and quantity of one or more different compounds in a sample using aptamer beacons. Aptamer beacons are oligonucleotides that have a binding region that can bind to a non-nucleotide target molecule, such as a protein, a steroid, or an inorganic molecule. New aptamer beacons having binding regions configured to bind to different target molecules can be used in solution-based and solid, array-based systems. The aptamer beacons can be attached to solid supports, e.g., at different predetermined points in two-dimensional arrays. The invention includes devices, methods, and computer software for carrying out the methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:117652 USPATFULL
TITLE: Nucleic acid-based detection
INVENTOR(S): Stanton, Martin, Stow, MA, UNITED STATES
Wensink, Pieter, Wellesley, MA, UNITED STATES
Stewart, Alexander, Waltham, MA, UNITED STATES
PATENT ASSIGNEE(S): Brandeis University, a Massachusetts corporation (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005100919	A1	20050512	
APPLICATION INFO.:	US 2003-668507	A1	20030923	(10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-569960, filed on 12 May 2000, GRANTED, Pat. No. US 6680377

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-174398P	20000105 (60)
	US 1999-134330P	19990514 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110, US
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1-10
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 1825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 85 OF 1264 USPATFULL on STN
TI Optical detector of organic analyte
AB The invention is directed to techniques for optically detecting changes in concentration of analytes in the body of a patient via fluorescent resonant energy transfer (FRET). An analyte detector implantable in the body of the patient includes a plurality of fluorophore-tagged sensing elements that bind to a specific analyte. A light emitter emits energy at a wavelength that is within the absorption spectrum of a donor fluorescent dye, and a light detector detects the energy fluoresced by donor and acceptor fluorescent dyes in the analyte detector. The relative intensity of energy fluoresced by the dyes is a function of the concentration of the analyte. A processor monitors the change in concentration of the analyte over time and may take action, such as directing the therapy device to administer therapy, when the change in concentration surpasses a predetermined threshold.

ACCESSION NUMBER: 2005:112429 USPATFULL
TITLE: Optical detector of organic analyte
INVENTOR(S): Soykan, Orhan, Shoreview, MN, UNITED STATES
Grant, Sheila A., Columbia, MO, UNITED STATES
Lichlyter, Darcy J., Columbia, MO, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005096516	A1	20050505
APPLICATION INFO.:	US 2003-698050	A1	20031030 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SHUMAKER & SIEFFERT, P. A., 8425 SEASONS PARKWAY, SUITE 105, ST. PAUL, MN, 55125, US
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 835

L4 ANSWER 86 OF 1264 USPATFULL on STN
TI Ocular diagnosis of alzheimer's disease
AB The invention features a method of diagnosing or providing a prognosis regarding the state of Alzheimer's Disease in a mammal by contacting an ocular tissue with a detectably-labeled compound, which binds to an amyloid protein. An increase in binding of the compound to the ocular tissue compared to a normal control level of binding indicates that the mammal is suffering from or is at risk of developing Alzheimer's Disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:111574 USPATFULL
TITLE: Ocular diagnosis of alzheimer's disease

INVENTOR(S): Goldstein, Lee E., Marblehead, MA, UNITED STATES
Chylack, Leo T. JR., Duxbury, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005095653	A1	20050505
APPLICATION INFO.:	US 2004-12937	A1	20041215 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-132779, filed on 25 Apr 2002, GRANTED, Pat. No. US 6849249

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-287124P	20010427 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL CENTER, BOSTON, MA, 02111, US
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 480
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 87 OF 1264 USPATFULL on STN
TI Support body for semiconductor element, method for manufacturing the same and semiconductor device
AB A semiconductor device comprising the semiconductor element and the support body made of a stack of ceramics layers having a recess in which a electrical conductors are electrically connected with the semiconductor element, wherein at least a part of the top face of the recess side wall is covered by a resin, thereby providing a light emitting device of high reliability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:109079 USPATFULL
TITLE: Support body for semiconductor element, method for manufacturing the same and semiconductor device
INVENTOR(S): Sakano, Kensho, Anan-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005093146	A1	20050505
APPLICATION INFO.:	US 2004-974889	A1	20041028 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-370001	20031030
	JP 2004-295058	20041007

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021, US
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2017
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 88 OF 1264 USPATFULL on STN
TI Fluorescent protein
AB An object of the present invention is to provide a novel fluorescent protein derived from organisms other than Aequorea Victoria. According to the present invention, there is provided a fluorescent protein derived from Fungia sp., which has the following properties: (1) the

excitation maximum wavelength is 455 nm, and the fluorescence maximum wavelength is 488 nm; (2) the molar absorption coefficient at 455 nm is 38700 or 27700; (3) the quantum yield is 0.85 or 0.81; and

(4) the pH sensitivity of the fluorescent property is stable at pH 5 to 9; and a fluorescent protein derived from Fungia sp., which has the following properties: (1) the excitation maximum wavelength is 548 nm, and the fluorescence maximum wavelength is 561 nm; (2) the molar absorption coefficient at 548 nm is 75900 or 51000; (3) the quantum yield is 0.44 or 0.50; and (4) the pH sensitivity of the fluorescent property is pKa<5.0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:105703 USPATFULL			
TITLE:	Fluorescent protein			
INVENTOR(S):	Miyawaki, Atsushi, Saitama, JAPAN Karasawa, Satoshi, Tokyo, JAPAN			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005090642	A1	20050428	
APPLICATION INFO.:	US 2003-498505	A1	20021220	(10)
	WO 2002-JP13363		20021220	
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 2003-2001387510		20011220	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE PLACE, RESTON, VA, 20191, US			
NUMBER OF CLAIMS:	17			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	6 Drawing Page(s)			
LINE COUNT:	1331			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 89 OF 1264 USPATFULL on STN

TI Ratiometric fluorescent pH sensor for non-invasive monitoring

AB The present invention provides ratiometric fluorescent pH sensors for non-invasive, continuous monitoring of pH in such applications as fermentation processes. The ratiometric fluorescent pH sensors comprise a fluorescent dye that exhibits a shift in excitation wavelength with a corresponding shift in pH in the local environment of said fluorescent dye. Ratiometric measurements of the emission intensities at dual excitation maxima correlate to pH. Also provided is a fluorescent dye 6-methacryloyl-8-hydroxy-1,3-pyrene disulfonic acid (MA-HPDS). Further provided are systems and methods to non-invasively and continuously monitor pH.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:105077 USPATFULL			
TITLE:	Ratiometric fluorescent pH sensor for non-invasive monitoring			
INVENTOR(S):	Rao, Govind, Columbia, MD, UNITED STATES Kostov, Iordan V., Baltimore, MD, UNITED STATES Kermis, Haley R., Baltimore, MD, UNITED STATES Harms, Peter, Ellicott City, MD, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005090014	A1	20050428	
APPLICATION INFO.:	US 2003-609720	A1	20030630	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-478051P	20030612 (60)
	US 2002-434034P	20021217 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071, US
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 1225
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 90 OF 1264 USPATFULL on STN
TI Homoaconitase as a target for fungicides
AB The present invention relates to the use of homoaconitase as novel target for fungicides. The present invention furthermore relates to identifying and isolating the nucleic acid sequence SEQ ID NO:1 coding for the protein homoaconitase and the functional equivalents of said sequence and to a method for identifying compounds with fungicidal action, based on the aforementioned nucleic acid sequences or the proteins encoded by said sequences. The present invention furthermore relates to a transgenic organism containing SEQ ID NO:1 or a functional equivalent of SEQ ID NO:1, which is distinguished by an increased lysine production, compared to a nontransgenic fungus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:104919 USPATFULL
TITLE: Homoaconitase as a target for fungicides
INVENTOR(S): Freund, Annette, Limburgerhof, GERMANY, FEDERAL REPUBLIC OF
Schafer, Wilhelm, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Sonnenberger, Karen, Hamburg, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005089854	A1	20050428	
APPLICATION INFO.:	US 2003-481568	A1	20020613	(10)
	WO 2002-EP6485		20020613	

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10129531	20010621

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KEIL & WEINKAUF, 1350 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036, US
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 2220
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 91 OF 1264 USPATFULL on STN
TI Method for photo-immobilizing and/or recovering a biomaterial
AB The present invention provides an advantageous method for immobilizing, analyzing and recovering a biomaterial, and a surface plasmon resonance sensor utilizing the advantage of the method. The method comprises processes of placing a biomaterial on a surface of a carrier having a predetermined photo-immobilizing material, immobilizing the biomaterial

by photo-irradiation, and carrying out detection, utilization, analysis or formation of a complex, followed by isolating the biomaterial by subsequent photo-irradiation and by applying external mechanical force to recover the biomaterial or the complex with maintaining the activity or the function thereof. The surface plasmon resonance sensor comprises a photo-immobilizing carrier, a photo-irradiation system, a surface plasmon measurement system and a means for applying moderate external mechanical force.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:104907 USPATFULL
TITLE:	Method for photo-immobilizing and/or recovering a biomaterial
INVENTOR(S):	Nakaoki, Yuichiro, Kisarazu-shi, JAPAN Watanabe, Osamu, Nagoya-shi, JAPAN Ikawa, Taiji, Aichi-ken, JAPAN Hoshino, Fumihiko, Bisai-shi, JAPAN
PATENT ASSIGNEE(S):	AISIN SEIKI KABUSHIKI KAISHA, Kariya-shi, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005089842	A1	20050428	
APPLICATION INFO.:	US 2004-941997	A1	20040916	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-324099	20030917

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314, US
NUMBER OF CLAIMS:	15
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Page(s)
LINE COUNT:	884

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 92 OF 1264 USPATFULL on STN

TI Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases

AB A method of immunizing against plaque forming diseases using display technology is provided. The method utilize novel agents, or pharmaceutical compositions for vaccination against plaque forming diseases which rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compositions for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:104577 USPATFULL
TITLE:	Agents and compositions and methods utilizing same useful in diagnosing and/or treating or preventing plaque forming diseases
INVENTOR(S):	Solomon, Beka, Herzlia Pituach, ISRAEL Hanan, Eilat, Tel Aviv, ISRAEL Frenkel, Dan, Rehovot, ISRAEL
PATENT ASSIGNEE(S):	Ramot at Tel-Aviv University Ltd., Tel Aviv, ISRAEL (non-U.S. corporation)

	NUMBER	KIND	DATE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005089510	A1	20050428
APPLICATION INFO.:	US 2004-749522	A1	20040102 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-162889, filed on 6 Jun 2002, ABANDONED Continuation of Ser. No. US 2000-629971, filed on 31 Jul 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-473653, filed on 29 Dec 1999, GRANTED, Pat. No. US 6703015

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-152417P	19990903 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300, WASHINGTON, DC, 20001-5303, US
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 2905
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 93 OF 1264 USPATFULL on STN
TI Refinement of pitch detection
AB Successive pitch periods/frequencies are accurately determined in an audio equivalent signal. Using a suitable conventional pitch detection technique, an initial value of the pitch frequency/period is determined for so-called pitch detection segments of the audio equivalent signal. Based on the determined initial value, a refined value of the pitch frequency/period is determined. To this end, the signal is divided into a sequence of pitch refinement segments. Each pitch refinement segment is associated with at least one of the pitch detection segments. The pitch refinement segments are filtered to extract a frequency component with a frequency substantially corresponding to an initially determined pitch frequency of an associated pitch detection segment. The successive pitch periods/frequencies are determined in the filtered signal.

ACCESSION NUMBER: 2005:101726 USPATFULL
TITLE: Refinement of pitch detection
INVENTOR(S): Gigi, Ercan F., Eindhoven, NETHERLANDS
PATENT ASSIGNEE(S): Koninklijke Philips Electronics N.V., Eindhoven, NETHERLANDS (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6885986	B1	20050426
APPLICATION INFO.:	US 1999-306960		19990507 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1998-201525	19980511
	EP 1998-202195	19980630

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: {hacek over (S)}mits, Talivaldis Ivars
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 961

L4 ANSWER 94 OF 1264 USPATFULL on STN
TI Microfluidic devices and methods of using same
AB An M+N matrix microfluidic device for performing a matrix of

reactions, the device having a plurality of reaction cells in communication with one of either a sample inlet or a reagent inlet through a via formed within an elastomeric block of the device. Methods provided include a method for forming vias in parallel in an elastomeric layer of an elastomeric block of a microfluidic device, the method comprising using patterned photoresist masks and etching reagents to etch away regions or portions of an elastomeric layer of the elastomeric block.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:98506 USPATFULL
TITLE:	Microfluidic devices and methods of using same
INVENTOR(S):	Unger, Marc, San Mateo, CA, UNITED STATES Huang, Jiang, San Jose, CA, UNITED STATES Quan, Emerson, South San Francisco, CA, UNITED STATES
PATENT ASSIGNEE(S):	Fluidigm Corporation, South San Francisco, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005084421	A1	20050421
APPLICATION INFO.:	US 2004-837885	A1	20040502 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2004-818642, filed on 5 Apr 2004, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-460634P	20030403 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US
NUMBER OF CLAIMS:	12
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	25 Drawing Page(s)
LINE COUNT:	2715

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 95 OF 1264 USPATFULL on STN

TI Long wavelength engineered fluorescent proteins

AB Engineered fluorescent proteins, nucleic acids encoding them and methods of use are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:92849 USPATFULL
TITLE:	Long wavelength engineered fluorescent proteins
INVENTOR(S):	Tsien, Roger Y., La Jolla, CA, UNITED STATES Remington, S. James, Eugene, OR, UNITED STATES Cubitt, Andrew B., San Diego, CA, UNITED STATES Heim, Roger, Del Mar, CA, UNITED STATES Ormo, Mats F., Huddinge, SWEDEN
PATENT ASSIGNEE(S):	The Regents of the University of California (U.S. corporation) Vertex Pharmaceuticals (San Diego) LLC (U.S. corporation) State of OR. Acting By and Through the State Board of Higher Edu. on Behalf of the University of OR. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005079525	A1	20050414
APPLICATION INFO.:	US 2004-924232	A1	20040823 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-71976, filed on 5 Feb 2002, GRANTED, Pat. No. US 6780975 Continuation of Ser. No. US 1999-465142, filed on 16 Dec 1999, GRANTED, Pat. No. US 6403374 Continuation of Ser. No. US 1997-974737, filed on 19 Nov 1997, GRANTED, Pat. No. US 6077707 Continuation of Ser. No. US 1997-911825, filed on 15 Aug 1997, GRANTED, Pat. No. US 6054321 Continuation-in-part of Ser. No. US 1996-706408, filed on 30 Aug 1996, GRANTED, Pat. No. US 6124128

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-24050P	19960816 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Lisa A. Haile, J.D., Ph.D., GARY CARY WARE & FREIDENRICH LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133, US
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1-7
NUMBER OF DRAWINGS: 53 Drawing Page(s)
LINE COUNT: 2139
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 96 OF 1264 USPATFULL on STN
TI Bit-wise optical data storage utilizing aluminum oxide single crystal medium
AB The present invention provides methods and apparatuses for writing information to, reading information from, and erasing information on a luminescent data storage medium comprising Al.sub.2O.sub.3. The method includes writing and erasing of the information using photoionization via sequential two-photon absorption and non-destructive reading the information using one-photon absorption and confocal fluorescent detection. The apparatuses for writing and reading the information incorporate confocal detection and spherical aberration correction for multilayer volumetric fluorescent data storage. The methods also allow multilevel recording and readout of information for increased storage capacity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:91916 USPATFULL
TITLE: Bit-wise optical data storage utilizing aluminum oxide single crystal medium
INVENTOR(S): Akselrod, Mark S., Stillwater, OK, UNITED STATES
Orlov, Sergei S., Mountain View, CA, UNITED STATES
Akselrod, Anna E., Stillwater, OK, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005078591	A1	20050414
APPLICATION INFO.:	US 2003-633654	A1	20030805 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-309021, filed on 4 Dec 2002, GRANTED, Pat. No. US 6846434 Continuation-in-part of Ser. No. US 2002-309179, filed on 4 Dec 2002, GRANTED, Pat. No. US 6811607 Continuation-in-part of Ser. No. US 2003-419726, filed on 22 Apr 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-336749P	20011204 (60)
	US 2002-417153P	20021010 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JAGTIANI + GUTTAG, 10363-A DEMOCRACY LANE, FAIRFAX, VA, 22030, US
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 1968
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 97 OF 1264 USPATFULL on STN
TI Diagnostic sensing apparatus
AB A sensing apparatus and methods for measuring or detecting an analyte present in a biological system are provided. The methods entail use of the sensing apparatus that contains a reporter system specific for the analyte of interest, where the reporter system is either affixed to a planar backing or attached to particles that are delivered to the superficial layers of the skin. The reporter system includes a reporting reagent that absorbs or emits a detectable radiation and is placed in communication with the analyte, or in communication with tissue or body fluids suspected of containing the analyte. The sensing apparatus is illuminated, and a radiation signal from the reporting reagent is measured or detected and then associated with the presence or quantity of analyte.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:75232 USPATFULL
TITLE: Diagnostic sensing apparatus
INVENTOR(S): Kwon, Sung-Yun, Fremont, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005064529	A1	20050324	
APPLICATION INFO.:	US 2004-499324	A1	20041105	(10)
	WO 2002-US37606		20021213	

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-10023104	20011217
	US 2001-341774P	20011217 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY AND LARDNER, SUITE 500, 3000 K STREET NW, WASHINGTON, DC, 20007
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
LINE COUNT: 1378
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 98 OF 1264 USPATFULL on STN
TI Multiplex binding and activity assays
AB Compositions, including antibodies, polypeptides, and organic molecules, kits, apparatuses, and methods for probing molecular interactions using fluorescence polarization (FP) and/or time-resolved resonance energy transfer (TR-RET) are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:75188 USPATFULL
TITLE: Multiplex binding and activity assays
INVENTOR(S): Vogel, Kurt, Madison, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005064485	A1	20050324

APPLICATION INFO.: US 2004-936343 A1 20040908 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-502377P	20030912 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 26 Drawing Page(s)
LINE COUNT: 2291
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 99 OF 1264 USPATFULL on STN
TI Green light emitting phosphor and light emitting device
AB As a green light emitting phosphor capable of emission upon excitation with light having a wavelength of 350 to 500 nm, characterized in containing Tb.sup.3+ ions as emission ions in high concentrations without causing concentration quenching, the present invention provides a green light emitting phosphor capable of emission upon excitation with light having a wavelength of 350 to 500 nm, characterized by having a composition represented by the compositional formula (1):

ATb.sub.xLn.sub.(1-x)M.sub.2O.sub.8 (1)

wherein A is at least one element selected from the group consisting of Li, Na, K, and Ag,

Ln is at least one element selected from rare earth elements including Y and excluding Tb,

M is at least one element selected from the group consisting of Mo and W, and

x is a positive number satisfying $0.4 \leq x \leq 1$, and a light emitting device incorporated with the green light emitting phosphor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:73114 USPATFULL
TITLE: Green light emitting phosphor and light emitting device
INVENTOR(S): Odaki, Tsutomu, Nishishirakawa-gun, JAPAN
PATENT ASSIGNEE(S): Kabushiki Kaisha Fine Rubber Kenkyuusho, Nishishirakawa-gun, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005062403	A1	20050324
APPLICATION INFO.:	US 2004-902849	A1	20040802 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-285668	20030804

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 833
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 100 OF 1264 USPATFULL on STN
TI Isolated VSHK-1 receptor polypeptides and methods of use thereof
AB A new seven transmembrane receptor has been identified, and the amino acid and nucleotide sequence of the receptor are provided. The nucleotide sequence is useful to construct expression cassettes and vectors to produce host cells which are capable of expressing the receptor, its mutants, fragments, or fusions. Such polypeptides are useful for identifying new receptor binding agonists and antagonists.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:69660 USPATFULL
TITLE:	Isolated VSHK-1 receptor polypeptides and methods of use thereof
INVENTOR(S):	Khoja, Hamiduddin, Emeryville, CA, UNITED STATES Shyamala, Venkatarkrishna, Emeryville, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005059801	A1	20050317
APPLICATION INFO.:	US 2003-698959	A1	20031030 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-433360, filed on 3 Nov 1999, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-107112P	19981104 (60)
	US 1999-114856P	19990106 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	4 Drawing Page(s)
LINE COUNT:	2909

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 101 OF 1264 USPATFULL on STN
TI Far field light microscopical method system and computer program product for analysing at least one object having a subwavelength size
AB The present invention relates to a far field light microscopical method, respectively a system and a computer program product for analysing at least one object having a subwavelength size in at least one spatial direction to obtain spatial information of the object, in particular size and topology thereof, comprising the steps of:--labelling the object(s) with one or more suitable optical markers;--providing suitably structured illumination light to at least partially illuminate the object(s);--subjecting the object(s) to the structured illumination light;--detecting an optical response of the object(s);--obtaining the spatial information of the object(s) by comparing the obtained response with simulation data of an optical response of object(s) having known spatial information.

ACCESSION NUMBER:	2005:69540 USPATFULL
TITLE:	Far field light microscopical method system and computer program product for analysing at least one object having a subwavelength size
INVENTOR(S):	Cremer, Christopher, Heidelberg, GERMANY, FEDERAL REPUBLIC OF Virgilio Failla, Antonio, Roma, ITALY Albrecht, Benno, Heidelberg, GERMANY, FEDERAL REPUBLIC

OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005059681	A1	20050317	
APPLICATION INFO.:	US 2004-492266	A1	20040517	(10)
	WO 2002-EP11343		20021009	

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-328021P	20011009	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CASELLA & HESPOS, 274 MADISON AVENUE, NEW YORK, NY, 10016
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Page(s)
LINE COUNT: 3625

L4 ANSWER 102 OF 1264 USPATFULL on STN
TI Quantitative binding assays using green fluorescent protein as a label
AB A heterogeneous binding assay for an analyte in a fluid sample is developed, which uses a green fluorescent protein (GFP) label. A ligand-GFP conjugate has a specific binding affinity for an anti-ligand immobilized on a support. The anti-ligand also has a specific binding affinity for the analyte. Competition between the analyte and ligand-GFP conjugate for binding sites on the anti-ligand permits an assay for an unknown amount of the analyte. Preferred specific binding pairs for use in the assay are biotin:avidin, and a selected antibody and its antigen. A preferred assay employing an antibody and its antigen is illustrated for a fusion protein containing GFP and an antigenic determinant. Picomolar amounts of analyte can be detected. The mutant of GFP that contains a six-histidine tail to facilitate purification on an immobilized metal affinity column is chemically **modified** to incorporate biotin moieties. The resulting conjugates retain the fluorescence characteristics of the unmodified protein and are used along with avidin-coated magnetic beads in the development of the assay.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:68958 USPATFULL
TITLE: Quantitative binding assays using green fluorescent protein as a label
INVENTOR(S): Daunert, Sylvia, Lexington, KY, UNITED STATES
Lewis, Jennifer C., Lexington, KY, UNITED STATES
Hernandez, Emily C., Lexington, KY, UNITED STATES
PATENT ASSIGNEE(S): The University of Kentucky Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005059097	A1	20050317	
APPLICATION INFO.:	US 2004-765063	A1	20040128	(10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-42643, filed on 17 Mar 1998, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 1476

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 103 OF 1264 USPATFULL on STN

TI Use of a fluorescent protein for detecting interaction between a target protein and its ligand

AB The invention concerns the use of a fluorescent protein selected in particular among the autofluorescent proteins for detecting the non-covalent interaction between a target protein marked by the fluorescent protein and one of its ligands marked by a marker consisting of: either a molecule capable of absorbing the light emitted by the fluorescent protein, or a fluorescent substance, said detection taking place by fluorescence energy transfer: between the fluorescent protein and said fluorescent substance, the fluorescent substance being such that it is excitable at the fluorescent protein emitting wavelength, or it emits at the fluorescent protein emitting wavelength; between the fluorescent protein and said molecule capable of absorbing the light emitted by the fluorescent protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:68897 USPATFULL
TITLE:	Use of a fluorescent protein for detecting interaction between a target protein and its ligand
INVENTOR(S):	Galzi, Jean-Luc, Strasbourg, FRANCE Alix, Philippe, Carpiquet, FRANCE
PATENT ASSIGNEE(S):	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, PARIS CEDEX, FRANCE (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005059036	A1	20050317
APPLICATION INFO.:	US 2004-776330	A1	20040212 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-445205, filed on 7 Jan 2000, ABANDONED A 371 of International Ser. No. WO 1998-FR1136, filed on 4 Jun 1998, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1997-6977	19970605

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	YOUNG & THOMPSON, 745 SOUTH 23RD STREET, 2ND FLOOR, ARLINGTON, VA, 22202
NUMBER OF CLAIMS:	16
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	22 Drawing Page(s)
LINE COUNT:	2850

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 104 OF 1264 USPATFULL on STN

TI Battery

AB A battery includes a battery can housing an cell that supplies electrical energy at terminals of the cell by an electro-chemical reaction with oxygen, the can including, a first member having at least one hole that is exposed to air; and a second member. The battery also includes a mechanism coupled to one of the first and second members to move the one of the first and second members such that when current is drawn from the battery, the opening in the member allows air to pass into the battery, and to move the one of the first and second members such that when current is not drawn from the battery, the opening in the member is not in registration to inhibit air to pass into the battery. The battery also includes a circuit to control the mechanism. In one embodiment the circuit monitors levels of O.sub.2 in a air plenum that surrounds the cell. The circuit to monitor levels of O.sub.2 in the air

plenum includes a florescent detector/sensor that senses and responds to changes in O.sub.2 in the plenum by using the "quenching effect" of oxygen on a fluorescent material

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:68748 USPATFULL		
TITLE:	Battery		
INVENTOR(S):	Richards, Thomas, Balton, MA, UNITED STATES Gilicinski, Andrew G., Westborough, MA, UNITED STATES Pavlinsky, Robert, Oxford, CT, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005058887	A1	20050317
APPLICATION INFO.:	US 2003-633339	A1	20030801 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110		
NUMBER OF CLAIMS:	58		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	7 Drawing Page(s)		
LINE COUNT:	672		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 105 OF 1264 USPATFULL on STN

TI Phthalamide-lanthanide complexes for use as luminescent markers

AB The present invention provides luminescent lanthanide metal chelates comprising a metal ion of the lanthanide series and a complexing agent comprising at least one phthalamidyl moiety. Also provided are probes incorporating the phthalamidyl ligands of the invention and methods utilizing the ligands of the invention and probes comprising the ligands of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:68466 USPATFULL		
TITLE:	Phthalamide-lanthanide complexes for use as luminescent markers		
INVENTOR(S):	Raymond, Kenneth N., Berkeley, CA, UNITED STATES Petoud, Stephane, Pittsburgh, PA, UNITED STATES Cohen, Seth, Boston, MA, UNITED STATES Xu, Jide, Berkeley, CA, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005058604	A1	20050317
APPLICATION INFO.:	US 2004-867882	A1	20040614 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-992156, filed on 14 Nov 2001, PENDING Division of Ser. No. US 2000-507630, filed on 18 Feb 2000, GRANTED, Pat. No. US 6515113		
	NUMBER	DATE	
PRIORITY INFORMATION:	US 1999-120881P	19990218 (60)	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	MORGAN, LEWIS & BOCKIUS LLP (SF), 2 PALO ALTO SQUARE, PALO ALTO, CA, 94306		
NUMBER OF CLAIMS:	47		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	23 Drawing Page(s)		
LINE COUNT:	4062		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 106 OF 1264 USPATFULL on STN

TI ATP-binding transporter (ABC7) and methods for detection of anemia and ataxia

AB Disclosed is a novel ATP-binding cassette gene (ABC7), polypeptide and methods of detecting mutations therein. Further, the disclosure provides methods of detecting ABC7 associated disease and treatments thereof. In particular, the disclosure provides methods of detecting X-linked Sideroblastic Anemia and Ataxia associated with a mutation in the ABC7 polypeptide.

ACCESSION NUMBER:	2005:65169 USPATFULL
TITLE:	ATP-binding transporter (ABC7) and methods for detection of anemia and ataxia
INVENTOR(S):	Dean, Michael, Frederick, MD, United States Allikmets, Rando, Monroe, NY, United States Hutchinson, Amy Ann, Fort Lee, NJ, United States
PATENT ASSIGNEE(S):	The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6867017	B1	20050315	
APPLICATION INFO.:	US 1999-422840		19991021	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1998-105497P	19981023	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Eyler, Yvonne
ASSISTANT EXAMINER:	Murphy, Joseph F.
LEGAL REPRESENTATIVE:	Klarquist Sparkman, LLP.
NUMBER OF CLAIMS:	23
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT:	2066

L4 ANSWER 107 OF 1264 USPATFULL on STN

TI Perylene derivative synthesis process, perylene derivative and organic EL device

AB The invention aims to provide a perylene derivative preparation process featuring satisfactory yields and improved preparation efficiency, a perylene derivative obtained by the process, and an organic EL device using the same. The object is achieved by a perylene derivative preparation process comprising subjecting to coupling reaction a 1,8-dihalogenated naphthalene derivative of the formula (1): ##STR1##

wherein X is Cl, Br or I, R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 each are hydrogen, alkyl, alkoxy, alkylthio, alkenyl, alkenyloxy, alkenylthio, aralkyl, aralkyloxy, aralkylthio, aryl, aryloxy, and arylthio radicals which may be substituted, amino radical, cyano radical, hydroxyl radical, --COOM.sub.1 radical (wherein M.sub.1 is hydrogen, alkyl, alkenyl, aralkyl or aryl), --COM.sub.2 radical (wherein M.sub.2 is hydrogen, alkyl, alkenyl, aralkyl, aryl or amino), or --OCOM.sub.3 radical (wherein M.sub.3 is alkyl, alkenyl, aralkyl or aryl), and at least two adjoining radicals selected from among R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 may bond or fuse together to form a substituted or unsubstituted carbocyclic aliphatic ring, aromatic ring or fused aromatic ring with the carbon atoms on which they substitute, with the proviso that when the carbocyclic aliphatic ring, aromatic ring or fused aromatic ring has substituent radicals, the substituent

radicals are the same as R.sub.1 to R.sub.4, R.sub.11 and R.sub.12, to thereby synthesize a perylene derivative of the formula (2): ##STR2##

wherein R.sub.1' to R.sub.4', R.sub.11' and R.sub.12' are as defined for R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 in formula (1), and R.sub.1 to R.sub.4, R.sub.11 and R.sub.12 and R.sub.1' to R.sub.4', R.sub.11' and R.sub.12' may be the same or different.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:63810 USPATFULL
TITLE:	Perylene derivative synthesis process, perylene derivative and organic EL device
INVENTOR(S):	Fujita, Tetsuji, Tokyo, JAPAN Ara, Kensuke, Tokyo, JAPAN Inoue, Tetsushi, Tokyo, JAPAN
PATENT ASSIGNEE(S):	TDK CORPORATION, Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054852	A1	20050310
APPLICATION INFO.:	US 2004-959222	A1	20041007 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-189248, filed on 5 Jul 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-203926	20010704

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Page(s)
LINE COUNT:	1784

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 108 OF 1264 USPATFULL on STN

TI Kinase and phosphatase assays

AB Compositions, methods, and kits for detecting and monitoring kinase or phosphatase activity are described. The compositions typically include a peptide, a detectable moiety, and a protease cleavage site. Modification of a peptide by a kinase or phosphatase alters the proteolytic sensitivity of the peptide, resulting in a change of a detectable property of the composition. Panel assays for determining substrates or modulators of kinase or phosphatase activity are also described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:63533 USPATFULL
TITLE:	Kinase and phosphatase assays
INVENTOR(S):	Werner, Elizabeth A., Madison, WI, UNITED STATES Klink, Tony A., Madison, WI, UNITED STATES Beebe, Jane A., Madison, WI, UNITED STATES Lasky, David A., Madison, WI, UNITED STATES Kleman-Leyer, Karen M., Madison, WI, UNITED STATES Somberg, Richard, Fitchburg, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054573	A1	20050310
APPLICATION INFO.:	US 2004-903529	A1	20040729 (10)

	NUMBER	DATE

PRIORITY INFORMATION:	US 2003-490771P	20030729 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402	
NUMBER OF CLAIMS:	91	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	3414	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 109 OF 1264 USPATFULL on STN

TI Novel fluorescent proteins

AB The present invention relates to novel variants of the fluorescent protein GFP having improved fluorescence properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:63013 USPATFULL		
TITLE:	Novel fluorescent proteins		
INVENTOR(S):	Thastrup, Ole, Birkerod, DENMARK Tullin, Soren, Soborg, DENMARK Poulsen, Lars Kongsbak, Holte, DENMARK Bjorn, Sara Petersen, Lyngby, DENMARK		
PATENT ASSIGNEE(S):	BioImage A/S (non-U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005054050	A1	20050310
APPLICATION INFO.:	US 2004-947178	A1	20040923 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-872364, filed on 1 Jun 2001, GRANTED, Pat. No. US 6818443 Continuation of Ser. No. US 2000-619310, filed on 19 Jul 2000, PENDING Continuation of Ser. No. US 1997-819612, filed on 17 Mar 1997, GRANTED, Pat. No. US 6172188 Continuation of Ser. No. WO 1996-DK51, filed on 31 Jan 1996, UNKNOWN		
	NUMBER	DATE	
PRIORITY INFORMATION:	DK 1995-1065	19950922	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747		
NUMBER OF CLAIMS:	13		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	12 Drawing Page(s)		
LINE COUNT:	1169		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 110 OF 1264 USPATFULL on STN

TI Kinase inhibitors and methods of use in screening assays and modulation of cell proliferation and growth

AB The invention relates to the discovery of a novel amino acid sequence motif, herein termed the RKIP motif, and to the family of proteins defined by the presence of that motif. Proteins comprising the RKIP motif modulate kinases involved in signal transduction pathways. The RKIP motif forms the basis for screening assays for the identification of agents useful for modulating signal transduction pathways subject to RKIP family mediated regulation, and for the diagnosis and treatment of disorders involving inappropriate activities of pathways subject to RKIP family medicated regulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:59174 USPATFULL
TITLE:	Kinase inhibitors and methods of use in screening assays and modulation of cell proliferation and growth
INVENTOR(S):	Sedivy, John M., Barrington, RI, United States Kolch, Walter, Glasgow, UNITED KINGDOM Yeung, Kam Chi, Barrington, RI, United States
PATENT ASSIGNEE(S):	Brown University Research Foundation, Providence, RI, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6864224	B1	20050308	
APPLICATION INFO.:	US 2000-654281		20000901	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1999-151992P	19990901	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Helms, Larry R.
ASSISTANT EXAMINER:	Yu, Misook
LEGAL REPRESENTATIVE:	Palmer & Dodge LLP, Williams, Kathleen M., Spar, Elizabeth
NUMBER OF CLAIMS:	1
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	13 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT:	2832

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 111 OF 1264 USPATFULL on STN

TI Membrane molecule indicator compositions and methods

AB The invention provides membrane molecule indicators, including polypeptides, encoding nucleic acid molecules and cells containing such polypeptides and nucleic acid molecules. The invention membrane molecule indicators are characterized in that fluorescence resonance energy transfer (FRET) between a donor fluorescent domain and an acceptor fluorescent domain indicates a property of the membrane molecule. Also provided are methods of using the invention membrane molecule indicators to determine a property of a membrane molecule, and to identify compounds that modulates a property of a membrane molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:56648 USPATFULL
TITLE:	Membrane molecule indicator compositions and methods
INVENTOR(S):	Jalink, Kees, Heemsted, NETHERLANDS
PATENT ASSIGNEE(S):	Novasite Pharmaceuticals, Inc (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005048563	A1	20050303	
APPLICATION INFO.:	US 2004-433245	A1	20040402	(10)
	WO 2001-EP13952		20011129	

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-250679P	20001130	(60)
	US 2000-256559P	20001218	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Cathryn Campbell, McDermott Will & Emery, 7th Floor, 4370 La Jolla Village Drive, San Diego, CA, 92122
NUMBER OF CLAIMS:	70

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 2134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 112 OF 1264 USPATFULL on STN
TI FRET imaging using an iterative estimation algorithm
AB A method and method for processing fluorescence resonance energy transfer (FRET) image data. The method includes the steps of obtaining a set of FRET images and a set of calibration images for a biological sample; and generating a set of estimation images with an estimation algorithm that uses image data from the set of FRET images and the set of calibration images.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:56640 USPATFULL
TITLE: FRET imaging using an iterative estimation algorithm
INVENTOR(S): Holmes, Timothy J., East Greenbush, NY, UNITED STATES
Zhang, Yupeng, Rensselaer, NY, UNITED STATES
Yuan, Yumin, Troy, NY, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005048555	A1	20050303	
APPLICATION INFO.:	US 2004-920619	A1	20040818	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-497589P	20030825 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HOFFMAN WARNICK & D'ALESSANDRO, LLC, 3 E-COMM SQUARE, ALBANY, NY, 12207
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 944
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 113 OF 1264 USPATFULL on STN
TI Methods to monitor molecule conformation and molecule/molecule proximity
AB The invention relates in part to methods for monitoring the conformation of molecules, include proteins. The methods of the invention are also useful to monitor the distance between two or more molecules, such as the distance between two proteins in a cell. Additionally, the methods of the invention are useful for determining the location of a molecule, e.g. a protein, within a cell or other environment. The invention also relates in part to assays for identifying and testing candidate compounds for modulating molecule conformation and/or molecule interactions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:56624 USPATFULL
TITLE: Methods to monitor molecule conformation and molecule/molecule proximity
INVENTOR(S): Hyman, Bradley T., Charlestown, MA, UNITED STATES
Berezovska, Oksana, Charlestown, MA, UNITED STATES
Bacskai, Brian, Charlestown, MA, UNITED STATES
Lleo, Alberto, Charlestown, MA, UNITED STATES
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005048539	A1	20050303
APPLICATION INFO.:	US 2004-868756	A1	20040614 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-478642P	20030613 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE, BOSTON, MA, 02210-2211
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Page(s)
LINE COUNT: 2732
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 114 OF 1264 USPATFULL on STN
TI Enzymatic diagnostic test for SARS and other viral diseases
AB The present invention is directed towards methods, compositions and kits for testing for a virus in a sample. The methods determine the presence of a viral enzyme by contacting the sample with a peptidal compound capable of being cleaved by the viral enzyme to form peptidal compound fragments. Detection of a peptidal compound **fragment** confirms the presence of the virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:56559 USPATFULL
TITLE: Enzymatic diagnostic test for SARS and other viral diseases
INVENTOR(S): Arad, Dorit, Tel Aviv, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005048473	A1	20050303
APPLICATION INFO.:	US 2004-875133	A1	20040623 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-480605P	20030623 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BRINKS HOFER GILSON & LIONE, P.O. BOX 10395, CHICAGO, IL, 60610
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1788
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 115 OF 1264 USPATFULL on STN
TI Method for separating fluorescence spectra of dyes present in a sample
AB A system and a method for setting a fluorescence spectrum measurement system for microscopy is disclosed. Using illuminating light (3) from at least one laser that emits light of one wavelength, a continuous wavelength region is generated. Dyes are stored, with the pertinent excitation and emission spectra, in a database of a computer system (23). For each dye present in the specimen (15), a band of the illuminating light (3) and a band of the detected light (17) are calculated, the excitation and emission spectra read out from the database being employed. Setting of the calculated band in the illuminating light and in the detected band [sic] is performed on the basis of the calculation. Lastly, data acquisition is accomplished with

the spectral microscope (100).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:54926 USPATFULL
TITLE:	Method for separating fluorescence spectra of dyes present in a sample
INVENTOR(S):	Olschewski, Frank, Heidelberg, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S):	Leica Microsystems Heidelberg GmbH, Mannheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005046836	A1	20050303	
APPLICATION INFO.:	US 2004-924422	A1	20040824	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-DE10339311	20030827

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	HOUSTON ELISEEVA, 4 MILITIA DRIVE, SUITE 4, LEXINGTON, MA, 02421
NUMBER OF CLAIMS:	28
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	7 Drawing Page(s)
LINE COUNT:	707

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 116 OF 1264 USPATFULL on STN

TI Multiparametric apparatus for monitoring multiple tissue vitality parameters

AB Apparatus for monitoring a plurality of tissue viability parameters of a substantially identical tissue element, in which a single illumination laser source provides illumination radiation at a wavelength such as to enable monitoring of blood flow rate and NADH or flavoprotein concentration, together with blood volume and also blood oxygenation state. In preferred embodiments, an external cavity laser diode system is used to ensure that the laser operates in single mode or at else in two or three non-competing modes, each mode comprising a relatively narrow bandwidth. A laser stabilisation control system is provided to ensure long term operation of the laser source at the desired conditions.

ACCESSION NUMBER:	2005:50804 USPATFULL
TITLE:	Multiparametric apparatus for monitoring multiple tissue vitality parameters
INVENTOR(S):	Pewzner, Eliahu, Modiin Ilit, ISRAEL Mayevsky, Avraham, Ramat Gan, ISRAEL Jaronkin, Alexander Vasilievitch, Rishon L'Zion, ISRAEL Derzy, Igor, Petach Tikvah, ISRAEL

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005043606	A1	20050224	
APPLICATION INFO.:	US 2004-490674	A1	20041012	(10)
	WO 2001-IL900		20010925	

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Kevin D McCarthy, Roach Brown McCarthy & Gruber, 1620 Liberty Building, Buffalo, NY, 14202
NUMBER OF CLAIMS:	81
EXEMPLARY CLAIM:	1

NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 2501

L4 ANSWER 117 OF 1264 USPATFULL on STN
TI Quantum dots and methods of use thereof
AB Quantum dots and methods of use thereof for labeling and analyzing polymers such as nucleic acid molecules are described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:49870 USPATFULL
TITLE: Quantum dots and methods of use thereof
INVENTOR(S): Gilmanshin, Rudolf, Waltham, MA, UNITED STATES
PATENT ASSIGNEE(S): U.S. Genomics, Inc., Woburn, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005042665	A1	20050224
APPLICATION INFO.:	US 2004-924146	A1	20040823 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-497191P	20030821 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Maria A. Trevisan, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 558
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 118 OF 1264 USPATFULL on STN
TI mmFP encoding nucleic acids, polypeptides, antibodies and methods of use thereof
AB mmFP encoding nucleic acids, polypeptides and antibodies immunologically specific therefor are disclosed. Methods of use thereof are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:43697 USPATFULL
TITLE: mmFP encoding nucleic acids, polypeptides, antibodies and methods of use thereof
INVENTOR(S): Sun, Yi, Highland Park, NJ, UNITED STATES
Falkowski, Paul, Princeton, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005037425	A1	20050217
APPLICATION INFO.:	US 2003-652529	A1	20030829 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-407478P	20020830 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 1823
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 119 OF 1264 USPATFULL on STN
TI Methods and apparatus for analysis of a biological specimen
AB A method and apparatus for automated analysis of transmitted and fluorescently labeled biological samples, wherein the apparatus automatically scans at a low magnification to acquire images which are analyzed to determine candidate cell objects of interest. Once candidate objects of interest are identified, further analysis is conducted automatically to process and collect data from samples having different staining agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:43678 USPATFULL		
TITLE:	Methods and apparatus for analysis of a biological specimen		
INVENTOR(S):	De La Torre-Bueno, Jose, Carlsbad, CA, UNITED STATES Bauer, Kenneth D., San Clemente, CA, UNITED STATES		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005037406	A1	20050217
APPLICATION INFO.:	US 2004-894776	A1	20040719 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2003-461786, filed on 12 Jun 2003, PENDING		
	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-579884P	20040615 (60)	
	US 2003-450824P	20030227 (60)	
	US 2002-388522P	20020612 (60)	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	FISH & RICHARDSON, PC, 12390 EL CAMINO REAL, SAN DIEGO, CA, 92130-2081		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	26 Drawing Page(s)		
LINE COUNT:	2040		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 120 OF 1264 USPATFULL on STN
TI Systems and methods for volumetric tissue scanning microscopy
AB In accordance with preferred embodiments of the present invention, a method for imaging tissue, for example, includes the steps of mounting the tissue on a computer controlled stage of a microscope, determining volumetric imaging parameters, directing at least two photons into a region of interest, scanning the region of interest across a portion of the tissue, imaging a plurality of layers of the tissue in a plurality of volumes of the tissue in the region of interest, sectioning the portion of the tissue and imaging a second plurality of layers of the tissue in a second plurality of volumes of the tissue in the region of interest, detecting a fluorescence image of the tissue due to said excitation light; and processing three-dimensional data that is collected to create a three-dimensional image of the region of interest.

ACCESSION NUMBER:	2005:42943 USPATFULL
TITLE:	Systems and methods for volumetric tissue scanning microscopy
INVENTOR(S):	So, Peter, Cambridge, MA, UNITED STATES Engelward, Bevin, Jamacia Plain, MA, UNITED STATES Ragan, Timothy, Cambridge, MA, UNITED STATES Bahlmann, Karsten, Cambridge, MA, UNITED STATES Kim, Ki Hean, Cambridge, MA, UNITED STATES

Hsu, Lily, Arlington, MA, UNITED STATES
Huang, Hayden, Somerville, MA, UNITED STATES
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005036667	A1	20050217
APPLICATION INFO.:	US 2003-642447	A1	20030815 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: THOMAS O. HOOVER, ESQ., BOWDITCH & DEWEY, LLP, 161 Worcester Road, P.O. Box 9320, Framingham, MA, 01701-9320
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Page(s)
LINE COUNT: 1888

L4 ANSWER 121 OF 1264 USPATFULL on STN
TI Acene-thiophene semiconductors
AB Acene-thiophene compounds are disclosed that are useful as organic semiconductors. The compounds, when used as the semiconductor layer in organic thin-film transistors exhibit device characteristics, like charge-carrier mobilities and current on/off ratios, that are comparable to those of pentacene. Also described are semiconductor devices comprising at least one compound of the invention; and articles comprising the semiconductor devices such as thin film transistors or transistor arrays, and electroluminescent lamps.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:41618 USPATFULL
TITLE: Acene-thiophene semiconductors
INVENTOR(S): Gerlach, Christopher P., Saint Paul, MN, UNITED STATES
PATENT ASSIGNEE(S): 3M Innovative Properties Company (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005035333	A1	20050217
APPLICATION INFO.:	US 2003-641730	A1	20030815 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: 3M INNOVATIVE PROPERTIES COMPANY, PO BOX 33427, ST. PAUL, MN, 55133-3427
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1389
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 122 OF 1264 USPATFULL on STN
TI Bis-transition-metal-chelate probes
AB A molecule for labeling a target material is provided including two transition-metal chelates and a detectable group. The molecule has the general structural formula (I): ##STR1##

wherein: (a) Y and Y' are each a transition metal, (b) R.sup.1 and R.sup.1' are each independently CH(COO.sup.-), CH(COOH), or absent; (c) R.sup.2 and R.sup.2' are linkers each having a length of from about 3.0 to about 20 Å; and (d) X is a detectable group. The linkers may be linear or branched, may contain aromatic moieties, and may optionally be further substituted. Methods of using the molecules of the invention as probes in detecting and analyzing target materials as well as kits

including the molecule of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:36872 USPATFULL
TITLE:	Bis-transition-metal-chelate probes
INVENTOR(S):	Ebright, Richard H., North Brunswick, NJ, UNITED STATES Ebright, Yon W., North Brunswick, NJ, UNITED STATES
PATENT ASSIGNEE(S):	Rutgers, The State University of New Jersey (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005031545	A1	20050210
APPLICATION INFO.:	US 2004-946786	A1	20040921 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-665227, filed on 17 Sep 2003, PENDING Continuation-in-part of Ser. No. WO 2002-US36180, filed on 12 Nov 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-410267P	20020913 (60)
	US 2002-367775P	20020328 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	HOFFMANN & BARON, LLP, 6900 JERICHO TURNPIKE, SYOSSET, NY, 11791
NUMBER OF CLAIMS:	23
EXEMPLARY CLAIM:	CLM-01-81
NUMBER OF DRAWINGS:	8 Drawing Page(s)
LINE COUNT:	1946

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 123 OF 1264 USPATFULL on STN

TI Capsule optical sensor

AB A capsule optical sensor includes an illuminator and a sensor. The illuminator has a light source that produces light in the wavelength range from 600 to 2000 nm and the sensor has a photoelectric detection element and a variable spectroscopic element in front of a light receiving surface of the photoelectric detection element that can separately detect emissions from different fluorescent labels. Alternatively, the sensor may have plural photoelectric detection elements and optical filters in front of light receiving surfaces of plural photoelectric detection elements, with the optical filters transmitting different wavelength bands so as to separately detect the emissions from different fluorescent labels. Also, the sensor may be a photoelectric detection element having a stack of light receiving layers, each for detecting a different fluorescent emission. In all cases, the sensor does not provide an imaging function, thereby minimizing the size of the capsule optical sensor.

ACCESSION NUMBER:	2005:34771 USPATFULL
TITLE:	Capsule optical sensor
INVENTOR(S):	Hasegawa, Akira, Tokyo, JAPAN Matsumoto, Shinya, Machida-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005029437	A1	20050210
APPLICATION INFO.:	US 2004-909391	A1	20040803 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-290080	20030808

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Arnold International, P.O. Box 129, Great Falls, VA, 22066
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 1125

L4 ANSWER 124 OF 1264 USPATFULL on STN
TI Emission ratiometric indicators of phosphorylation by C-kinase
AB A chimeric phosphorylation indicator (CPI) as provided herein can contain a donor molecule, a phosphorylatable domain, a phosphoaminoacid binding domain (PAABD), and an acceptor molecule. Where the phosphorylatable domain is phosphorylatable by protein kinase C (PKC), the CPI is a c-kinase activity reporter (CKAR). Donor and acceptor molecules may be, independently, fluorescent proteins such as non-oligomerizing fluorescent proteins. A CPI can contain a phosphorylatable polypeptide and a fluorescent protein; the phosphorylatable polypeptide may be contained within the sequence of the fluorescent protein, or the fluorescent protein may be contained within the sequence of the phosphorylatable polypeptide. The spatiotemporal properties of the PKC signal pathway may be tested with CKAR, calcium-sensing fluorophores and FRET-based translocation assays. Polynucleotides encoding such CPIs, and kits containing the indicators and/or the polynucleotides, are provided. A method of using the chimeric phosphorylation indicators to detect a kinase or phosphatase in a sample is provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:30803 USPATFULL
TITLE: Emission ratiometric indicators of phosphorylation by C-kinase
INVENTOR(S): Violin, Jonathan D., Durham, NC, UNITED STATES
Newton, Alexandra C., San Diego, CA, UNITED STATES
Tsien, Roger Y., La Jolla, CA, UNITED STATES
Zhang, Jin, Baltimore, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005026234	A1	20050203
APPLICATION INFO.:	US 2004-857622	A1	20040528 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-865291, filed on 24 May 2001, PENDING Continuation-in-part of Ser. No. US 1999-396003, filed on 13 Sep 1999, ABANDONED Continuation of Ser. No. US 1997-792553, filed on 31 Jan 1997, GRANTED, Pat. No. US 5981200 Continuation-in-part of Ser. No. US 1996-594575, filed on 31 Jan 1996, GRANTED, Pat. No. US 6803188
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506
NUMBER OF CLAIMS: 72
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 4215
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 125 OF 1264 USPATFULL on STN
TI Detection of conformationally altered proteins and prions
AB The invention provides methods and kits for detecting conformationally altered proteins and prions in a sample. In one embodiment, the

conformationally altered proteins and prions are associated with amyloidogenic diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:30734 USPATFULL
TITLE:	Detection of conformationally altered proteins and prions
INVENTOR(S):	Orser, Cindy, McLean, VA, UNITED STATES Grosset, Anne, La Croix-de-Rozon, SWITZERLAND Davidson, Eugene A., Washington, DC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005026165	A1	20050203
APPLICATION INFO.:	US 2003-728246	A1	20031204 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-161061, filed on 30 May 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-295456P	20010531 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Henry D. Coleman, 714 Colorado Avenue, Bridgeport, CT, 06605-1601
NUMBER OF CLAIMS:	99
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	19 Drawing Page(s)
LINE COUNT:	2364

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 126 OF 1264 USPATFULL on STN

TI Light emitting device having thio-selenide fluorescent phosphor

AB Provided herein are novel phosphors useful in the manufacture of white light emitting diodes. The phosphors provided by the invention are described by the formulae:

MA.sub.2(S.sub.xSe.sub.y).sub.4:B

and/or

M.sub.2A.sub.4(S.sub.xSe.sub.y).sub.7:B

in which x, and y are each independently any value between 0 and 1, including 0 and 1 subject to the proviso that the sum of x and y is equal to any number in the range of between about 0.75 and about 1.25; M is at least one of Be, Mg, Ca, Sr, Ba, Zn; A is at least one of Al, Ga, In, Y, La, and Gd; and wherein the activator(s), B, comprises one or more element selected from the group consisting of: Eu, Ce, Cu, Ag, Al, Tb, Cl, Br, F, I, Mg, Pr, K, Na, and Mn, including mixtures comprising any two, any three, any four, any five, any six, any seven, or more of these elements in any proportion, and wherein the elements in these mixtures may each independently be present in any amount between 0.0001% and about 10% in mole percent based on the total molar weight of said composition.

Standard techniques used in phosphor deposition for the manufacture of light emitting diodes which comprise phosphors may be employed to produce LED's having a white light output when the phosphors of the invention are utilized.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:28544 USPATFULL

TITLE: Light emitting device having thio-selenide fluorescent phosphor
INVENTOR(S): Menkara, Hisham, Mableton, GA, UNITED STATES
Summers, Christopher, Atlanta, GA, UNITED STATES
Wagner, Brent K., Marietta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005023963	A1	20050203
APPLICATION INFO.:	US 2004-801082	A1	20040315 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-661931, filed on 15 Sep 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-492008P	20030802 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Christopher J. Whewell, Western Patent Group, 6020 Tonkowa Trail, Georgetown, TX, 78628
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1123
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 127 OF 1264 USPATFULL on STN
TI Light emitting device having selenium-based fluorescent phosphor
AB Provided herein are novel phosphors useful in the manufacture of white light emitting diodes. The phosphors provided by the invention are described by the formulae:

MS.sub.xSe.sub.y: B

in which x, and y are each independently any value between about 0 and about 1, subject to the proviso that the sum of x and y is equal to any number in the range of between about 0.75 and about 1.25; M is at least one of Be, Mg, Ca, Sr, Ba, Zn, excepting Zn alone; and wherein the activator(s) B comprises one or more elements selected from the group consisting of: Eu, Ce, Cu, Ag, Al, Tb, Sb, Bi, K, Na, Cl, F, Br, I, Mg, Pr, and Mn, including mixtures comprising any two, any three, any four, any five, any six, any seven, or more of these elements in any proportion, and wherein the elements in these mixtures may each independently be present in any amount between 0.0001% and about 10% in mole percent based on the total molar weight of said composition.

Standard techniques used in conventional phosphor deposition for the manufacture of light emitting diodes which comprise phosphors according to the invention may be employed to produce LED's having a white light output.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:28129 USPATFULL
TITLE: Light emitting device having selenium-based fluorescent phosphor
INVENTOR(S): Menkara, Hisham, Mableton, GA, UNITED STATES
Summers, Christopher, Atlanta, GA, UNITED STATES
Wagner, Brent K., Marietta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005023546	A1	20050203
APPLICATION INFO.:	US 2004-801067	A1	20040315 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-661931, filed on 15 Sep 2003, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-492008P	20030802 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Christopher J. Whewell, Western Patent Group, 6020 Tonkowa Trail, Georgetown, TX, 78628
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 767
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 128 OF 1264 USPATFULL on STN
TI Method and device for separating molecules having different excitation spectra
AB The invention relates to a method for the separation of molecules having different excitation spectra, which form components of a gas. The molecules are excited by laser pulses in a way that the molecules to be separated are transferred into a state of excitation due to multi-absorption of energy quanta from laser pulses, and in which they are extracted from the gas so that they exist in a composition determined by the form of the laser pulses. According to the invention, the laser pulses are formed by an iterative process in which each laser pulse varies in its form depending on the extracted molecules' composition after their absorption of energy quanta.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:27710 USPATFULL
TITLE: Method and device for separating molecules having different excitation spectra
INVENTOR(S): Woste, Ludger, Berlin, GERMANY, FEDERAL REPUBLIC OF
Lindinger, Albrecht, Berlin, GERMANY, FEDERAL REPUBLIC OF
Lupulescu, Cosmin, Humberg, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005023127	A1	20050203	
APPLICATION INFO.:	US 2004-909135	A1	20040730	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10336057	20030801

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Robert Mallinckrodt, Law office Mallinckrodt & Mallinckrodt, Suite 510, 10 Exchange Place, Salt Lake City, UT, 84111
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 779
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 129 OF 1264 USPATFULL on STN
TI Polypeptides having carotenoids isomerase catalytic activity, nucleic acids encoding same and uses thereof
AB An isolated nucleic acid which comprises a polynucleotide encoding a

polyp
<------User Break------>
ors of the present
invention, proteins, protein fragments, and protein fusions of the novel AMLP1 isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising AMLP1 nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous orthologue of the AMLP1 gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the AMLP1 nucleic acids, proteins, and antibodies of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2004:314467 USPATFULL			
TITLE:	Human angiomotin-like protein 1			
INVENTOR(S):	Shannon, Mark, Livermore, CA, UNITED STATES Phan, Thuymy, San Jose, CA, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004248138	A1	20041209	
APPLICATION INFO.:	US 2004-494343	A1	20040430	(10)
	WO 2002-US35129		20021101	
	NUMBER		DATE	
PRIORITY INFORMATION:	US 2001-334773P		20011101	(60)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	AMERSHAM BIOSCIENCES, PATENT DEPARTMENT, 800 CENTENNIAL AVENUE, PISCATAWAY, NJ, 08855			
NUMBER OF CLAIMS:	47			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	19 Drawing Page(s)			
LINE COUNT:	4289			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 167 OF 1264 USPATFULL on STN
TI Waveguide grating structure and optical measurement arrangement
AB The present invention describes (bio)chemo-functional waveguide grating structures consisting of at least one (bio)chemo-functional waveguide grating structure unit or at least one (bio)chemo-functional sensor location with beam guidance permitting light beam separation, as well as detection methods for parallel analysis which are marking-free or based on marking.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2004:313563 USPATFULL			
TITLE:	Waveguide grating structure and optical measurement arrangement			
INVENTOR(S):	Tiefenthaler, Kurt, Zurich, SWITZERLAND			
PATENT ASSIGNEE(S):	ARTIFICIAL SENSING INSTRUMENTS ASI AG, Zurich, SWITZERLAND (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004247229	A1	20041209	
APPLICATION INFO.:	US 2004-885449	A1	20040706	(10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2003-344142, filed on 7 Feb 2003, GRANTED, Pat. No. US 6785433 A 371 of International Ser. No. WO 2001-CH486, filed on 9 Aug 2001, UNKNOWN			

	NUMBER	DATE
PRIORITY INFORMATION:	CH 2000-1559	20000809

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: RANKIN, HILL, PORTER & CLARK LLP, 4080 ERIE STREET, WILLOUGHBY, OH, 44094-7836
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2610
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 168 OF 1264 USPATFULL on STN
TI Anti-counterfeiting marker for affixing variable entries on a support to be marked, method and resulting mark
AB The invention concerns an anti-counterfeiting marker for providing variable entries (19) and for fixing them on a support (18) to be marked comprising: a sheet-like core (1) having at least a first coloured effect (21), visible when illuminated by predetermined light, and on the reverse side of the core (1), a brittle thickness (3) having a printing surface (4) designed to be damaged and peeled off the core (1) when scratched or erased in an attempt to counterfeit the variable entries (19), and including at least a second coloured effect (22) visible on the side of the printing surface (4) at least when illuminated by said predetermined light, and designed, by combination with the first coloured effect (21), to produce a third coloured effect (23). The invention also concerns the method for using such a marker and to the resulting marked medium.

ACCESSION NUMBER: 2004:312105 USPATFULL
TITLE: Anti-counterfeiting marker for affixing variable entries on a support to be marked, method and resulting mark
INVENTOR(S): Trantoul, Francois, Lunel, FRANCE

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004245763	A1	20041209	
APPLICATION INFO.:	US 2004-490284	A1	20040322	(10)
	WO 2002-FR2938		20020827	

	NUMBER	DATE
PRIORITY INFORMATION:	FR 2001-12267	20010921

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: YOUNG & THOMPSON, 745 SOUTH 23RD STREET, 2ND FLOOR, ARLINGTON, VA, 22202
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 929

L4 ANSWER 169 OF 1264 USPATFULL on STN
TI Detecting microbial contamination in grain and related products
AB The invention provides for methods of determining the presence, absence, or amount of microbial contamination in grain and related products. The invention further provides for methods of monitoring grain and related products before, during, or after processing of the grain or related product into, for example, feed. The invention also provides for articles of manufacture for carrying out the claimed methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:306991 USPATFULL
TITLE: Detecting microbial contamination in grain and related products
INVENTOR(S): Robey, W. Wade, Excelsior, MN, UNITED STATES
Jones, Alison M., Eden Prairie, MN, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004241662	A1	20041202	
APPLICATION INFO.:	US 2003-449458	A1	20030530	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & RICHARDSON P.C., 3300 DAIN RAUSCHER PLAZA, 60 SOUTH SIXTH STREET, MINNEAPOLIS, MN, 55402
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
LINE COUNT: 1879
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 170 OF 1264 USPATFULL on STN
TI Spectrometer incorporating signal matched filtering
AB An optical system for performing a spectral analysis of test samples is provided. The optical system comprises a photonic energy source, an optical emission processing system, a received light optical processing system, an optical detector and a digital signal processing system. The optical emission processing system transmits one or more illumination wavelengths to a test sample. The received light optical processing system collects and isolates one or more wavelengths received from the test sample and transmits them to an optical detector. The optical detector converts the isolated one or more wavelengths of received electromagnetic radiation into an electrical signal which is transmitted to the digital signal processing system. The digital signal processing system performs matched filtering of the electrical signal received from the optical detector and additionally controls the functionality of the photonic energy source, the optical emission processing system and the received light optical processing system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:305264 USPATFULL
TITLE: Spectrometer incorporating signal matched filtering
INVENTOR(S): Adams, Bruce W., Cloverdale, CANADA
McConnell, Peter R.H., Vancouver, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004239923	A1	20041202	
APPLICATION INFO.:	US 2004-489992	A1	20040319	(10)
	WO 2002-CA1423		20020919	

	NUMBER	DATE
PRIORITY INFORMATION:	CA 2001-2357668	20010919

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Tiberiu Weisz, Gottlieb Rackman & Reisman, 270 Madison Avenue, New York, NY, 10016-0601
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 1467
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 171 OF 1264 USPATFULL on STN

TI Methods and apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices

AB Methods and apparatus for contemporaneous measurements of electromagnetic radiation with multiple measuring devices, for producing a high diagnostic sensitivity image while achieving high diagnostic specificity with spectroscopy, for producing illumination for fluorescence/NIR reflectance imaging and white light reflectance imaging, all with the same sensors are disclosed. The method may involve selectively adjusting a gain of an imaging device in at least one wavelength band relative to a gain in at least one other band to produce an optimized image of an object, and may also involve producing a first reflectance signal in a first NIR wavelength band, and producing a second reflectance signal in a second NIR band such that an absorption coefficient ratio of oxyhemoglobin to deoxyhemoglobin in the second wavelength band differs from that in the first wavelength band, to permit the first and second reflectance signals to be used to produce a tissue oxygenation image.

ACCESSION NUMBER:	2004:302343 USPATFULL
TITLE:	Methods and apparatus for fluorescence and reflectance imaging and spectroscopy and for contemporaneous measurements of electromagnetic radiation with multiple measuring devices
INVENTOR(S):	Zeng, Haishan, 1776 West 40th Avenue, Vancouver, British Columbia, CANADA V6M 1W2 Lam, Stephen, 5512 Wycliffe Road, Vancouver, British Columbia, CANADA V6T 2E3 Palcic, Branko Mihael, 3758 Quesnel Drive, Vancouver, British Columbia, CANADA V6L 2W8

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6826424	B1	20041130	
APPLICATION INFO.:	US 2000-741731		20001219	(9)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Robinson, Daniel
LEGAL REPRESENTATIVE:	Graybeal Jackson Haley LLP
NUMBER OF CLAIMS:	17
EXEMPLARY CLAIM:	1,11
NUMBER OF DRAWINGS:	19 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT:	2869

L4 ANSWER 172 OF 1264 USPATFULL on STN

TI Renilla reniformis green fluorescent protein and mutants thereof

AB The invention relates to recombinant polynucleotides encoding the Green Fluorescent Protein (GFP) from R. reniformis, as well as polynucleotides encoding variants and fusion polypeptides of R. reniformis GFP. The invention further relates to vectors encoding R. Reniformis GFP and variants and fusions thereof, as well as to cells comprising and/or expressing such vectors. The invention also relates to recombinant R. reniformis GFP polypeptides and fusion polypeptides and variants thereof, as well as to methods of making and using such polypeptides both in vivo and in vitro.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2004:299233 USPATFULL
TITLE:	Renilla reniformis green fluorescent protein and mutants thereof
INVENTOR(S):	Sorge, Joseph A., Wilson, WY, UNITED STATES

Vaillancourt, Peter E., Del Mar, CA, UNITED STATES
Felts, Katherine A., San Diego, CA, UNITED STATES
PATENT ASSIGNEE(S): Stratagene (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235100	A1	20041125
APPLICATION INFO.:	US 2004-786425	A1	20040225 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-795040, filed on 26 Feb 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-210561P	20000609 (60)
	US 2000-185589P	20000228 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS / STR, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2138
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 173 OF 1264 USPATFULL on STN
TI Methods of detecting interactions between proteins, peptides or libraries thereof using fusion proteins
AB The present invention provides a method for identifying a polypeptide that interacts with a known protein, which method uses fusion proteins with GFP fragments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:299197 USPATFULL
TITLE: Methods of detecting interactions between proteins, peptides or libraries thereof using fusion proteins
INVENTOR(S): Hamilton, Andrew D., Guilford, CT, UNITED STATES
Ghosh, Indraneel, Tucson, AZ, UNITED STATES
Regan, Lynne, New Haven, CT, UNITED STATES
PATENT ASSIGNEE(S): Yale University (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235064	A1	20041125
APPLICATION INFO.:	US 2004-799713	A1	20040315 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-853897, filed on 14 May 2001, GRANTED, Pat. No. US 6780599

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-203712P	20000512 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: CLM-001-2
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1426
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 174 OF 1264 USPATFULL on STN
TI High resolution linear analysis of polymers

AB The invention provides methods and systems for improved spatial resolution of signal detection, particularly as applied to the analysis of polymers such as biological polymers. Some of the methods and systems comprise differentially tagging polymers in order to increase resolution. Some of the methods and systems comprise techniques for improving the precision of separation distance measurements, without necessarily requiring improvements in the known detection resolution of prior art systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2004:299147 USPATFULL
TITLE:	High resolution linear analysis of polymers
INVENTOR(S):	Nadel, Mark, Westborough, MA, UNITED STATES Chan, Eugene Y., Brookline, MA, UNITED STATES Fuchs, Martin, Uxbridge, MA, UNITED STATES Gilmanshin, Rudolf, Waltham, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235014	A1	20041125
APPLICATION INFO.:	US 2004-762207	A1	20040121 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-246779, filed on 18 Sep 2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-322981P	20010918 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Walt Norfleet, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210
NUMBER OF CLAIMS:	70
EXEMPLARY CLAIM:	CLM-01-65
NUMBER OF DRAWINGS:	8 Drawing Page(s)
LINE COUNT:	2892

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 175 OF 1264 USPATFULL on STN

TI Speech encoder using voice activity detection in coding noise

AB A multi-rate speech codec supports a plurality of encoding bit rate modes by adaptively selecting encoding bit rate modes to match communication channel restrictions. In higher bit rate encoding modes, an accurate representation of speech through CELP (code excited linear prediction) and other associated modeling parameters are generated for higher quality decoding and reproduction. For each bit rate mode selected, pluralities of fixed or innovation subcodebooks are selected for use in generating innovation vectors. The speech coder distinguishes various voice signals as a function of their voice content. For example, a Voice Activity Detection (VAD) algorithm selects an appropriate coding scheme depending on whether the speech signal comprises active or inactive speech. The encoder may consider varying characteristics of the speech signal including sharpness, a delay correlation, a zero-crossing rate, and a residual energy. In another embodiment of the present invention, code excited linear prediction is used for voice active signals whereas random excitation is used for voice inactive signals; the energy level and spectral content of the voice inactive signal may also be used for noise coding.

ACCESSION NUMBER:	2004:295071 USPATFULL
TITLE:	Speech encoder using voice activity detection in coding noise
INVENTOR(S):	Su, Huan-Yu, San Clemente, CA, United States Benyassine, Adil, Irvine, CA, United States

Thyssen, Jes, Laguna Niguel, CA, United States
PATENT ASSIGNEE(S): Conexant Systems, Inc., Newport Beach, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6823303	B1	20041123
APPLICATION INFO.:	US 1998-156832		19980918 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97569P	19980824 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Tsang, Fan
ASSISTANT EXAMINER: Opsasnick, Michael N.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 2121

L4 ANSWER 176 OF 1264 USPATFULL on STN
TI Target molecules detection by waveguiding in a photonic silicon membrane
AB Disclosed herein is a porous silicon filter capable of binding and detecting biological and chemical target molecules in liquid or gas samples. A photonic waveguiding silicon filter with chemical and/or biological anchors covalently attached to the pore walls bind target molecules. The system uses transmission curve engineering principles to allow measurements to be made in situ and in real time to detect the presence of various target molecules and calculate the concentration of bound target.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:291491 USPATFULL
TITLE: Target molecules detection by waveguiding in a photonic silicon membrane
INVENTOR(S): Letant, Sonia E., Livermore, CA, UNITED STATES
Buuren, Anthony Van, Livermore, CA, UNITED STATES
Terminello, Louis, Danville, CA, UNITED STATES
Hart, Bradley R., Brentwood, CA, UNITED STATES
PATENT ASSIGNEE(S): The Regents of the University of California (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004228568	A1	20041118
APPLICATION INFO.:	US 2004-833573	A1	20040427 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-159175, filed on 31 May 2002, GRANTED, Pat. No. US 6785432

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-298442P	20010615 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Ann M. Lee, Assistant Laboratory Counsel, Lawrence Livermore National Laboratory, P.O. Box 808, L-703, Livermore, CA, 94551
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 828
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 177 OF 1264 USPATFULL on STN
TI Sensors, and methods of making and using the same
AB The present invention is directed, in part, to sensors for detecting metal ions, and methods of making and using the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2004:286258 USPATFULL			
TITLE:	Sensors, and methods of making and using the same			
INVENTOR(S):	Lippard, Stephen J., Cambridge, MA, UNITED STATES Woodroofe, Carolyn Crystal, Cambridge, MA, UNITED STATES			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004224420	A1	20041111	
APPLICATION INFO.:	US 2003-429898	A1	20030504	(10)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110			
NUMBER OF CLAIMS:	32			

<------User Break------>

Refine Search

Search Results -

Terms	Documents
L8 and L7	3

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L9

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Friday, September 16, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT; PLUR=YES; OP=OR			
L9	L8 and l7	3	L9
L8	l6 and (excitation maxima)	7149	L8
L7	L6 and l5	3	L7
L6	GFP and (modified or mutant or fragment)	11367	L6
L5	L4 and l1	35	L5
L4	L3 and l2	1677	L4
L3	michael.in.	186049	L3
L2	jones.in.	25176	L2
L1	lawrence.in.	35922	L1

END OF SEARCH HISTORY

Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20040138420 A1

Using default format because multiple data bases are involved.

L9: Entry 1 of 3 File: PGPB Jul 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040138420
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040138420 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: July 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon Lawrence John	Amersham		GB	
Jones, Anne Elizabeth	Amersham		GB	
Michael, Nigel Paul	Amersham		GB	
Thomas, Nicholas	Amersham		GB	

US-CL-CURRENT: 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima

☐ 2. Document ID: US 20030175859 A1

L9: Entry 2 of 3 File: PGPB Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030175859
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030175859 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon Lawrence John	Amersham Buckinghamshire		GB	
Jones, Anne Elizabeth	Amersham Buckinghamshire		GB	
Michael, Nigel Paul	Amersham Buckinghamshire		GB	
Thomas, Nicholas	Amersham Buckinghamshire		GB	

US-CL-CURRENT: 435/69.1; 435/183, 435/320.1, 435/325, 530/350, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima

☐ 3. Document ID: US 6919186 B2

US-PAT-NO: 6919186
DOCUMENT-IDENTIFIER: US 6919186 B2

TITLE: Fluorescent proteins

DATE-ISSUED: July 19, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stubbs; Simon Lawrence John	Amersham			GB
Jones; Anne Elizabeth	Amersham			GB
Michael; Nigel Paul	Amersham			GB
Thomas; Nicholas	Amersham			GB

US-CL-CURRENT: 435/69.1; 435/252.1, 435/320.1, 435/325, 435/6, 435/69.7, 435/7.1, 435/70.1, 530/350, 536/23.1

Terms	Documents
L8 and L7	3

Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20040138420 A1

Using default format because multiple data bases are involved.

L9: Entry 1 of 3 File: PGPB Jul 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040138420
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040138420 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: July 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon Lawrence John	Amersham		GB	
Jones, Anne Elizabeth	Amersham		GB	
Michael, Nigel Paul	Amersham		GB	
Thomas, Nicholas	Amersham		GB	

US-CL-CURRENT: 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima

☐ 2. Document ID: US 20030175859 A1

L9: Entry 2 of 3 File: PGPB Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030175859
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030175859 A1

TITLE: Fluorescent proteins

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Stubbs, Simon Lawrence John	Amersham Buckinghamshire		GB	
Jones, Anne Elizabeth	Amersham Buckinghamshire		GB	
Michael, Nigel Paul	Amersham Buckinghamshire		GB	
Thomas, Nicholas	Amersham Buckinghamshire		GB	

US-CL-CURRENT: 435/69.1; 435/183, 435/320.1, 435/325, 530/350, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Ima

☐ 3. Document ID: US 6919186 B2

US-PAT-NO: 6919186
DOCUMENT-IDENTIFIER: US 6919186 B2

TITLE: Fluorescent proteins

DATE-ISSUED: July 19, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stubbs; Simon Lawrence John	Amersham			GB
Jones; Anne Elizabeth	Amersham			GB
Michael; Nigel Paul	Amersham			GB
Thomas; Nicholas	Amersham			GB

US-CL-CURRENT: 435/69.1; 435/252.1, 435/320.1, 435/325, 435/6, 435/69.7, 435/7.1, 435/70.1, 530/350, 536/23.1

Terms	Documents
L8 and L7	3